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GUIDELINES FOR COOPERATIVE EDUCATION AND SELECTED MATERIALS FROM THE NATIONAL SEMINAR HELD AUGUST 1-5, 1966, A MANUAL FOR THE FURTHER DEVELOPMENT OF COOPERATIVE EDUCATION.

BY- HUFFMAN, HARRY

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THE OBJECTIVES OF THE SEMINAR WERE TO PROMOTE THE USE OF COOPERATIVE EDUCATION IN ALL VOCATIONAL SERVICES AND TO EXPLORE THE POSSIBILITIES OF INTERSERVICE TRAINING FOR OCCUPATIONS REQUIRING KNOWLEDGE AND SKILLS FROM SEVERAL AREAS. IT WAS ATTENDED BY OVER 110 STATE LEADERS FROM 41 STATES. THE GUIDELINES ARE ORGANIZED IN FIVE GROUPS DEALING WITH THE SCHOOL, THE TEACHER-COORDINATOR, THE PROGRAM, THE STUDENT-TRAINEE, AND THE EMPLOYER. AMONG THE SEVENTEEN PAPERS WERE--(1) "IMPENDING SOCIAL, ECONOMIC, AND EMPLOYMENT CHANGES THAT MAY AFFECT COOPERATIVE EDUCATION," (2) "COOPERATIVE EDUCATION AS A POLICY OF THE NATIONAL SCHOOL BOARDS ASSOCIATION," (3) "ESTABLISHMENT, ORGANIZATION, AND OPERATION OF COOPERATIVE EDUCATION," AND (4) "SOME QUESTIONS THAT NEED TO BE ANSWERED ABOUT THE TRAINING OF COORDINATORS." THE APPENDIX CONTAINS (1) SPEAKER-CONSULTANT BIOGRAPHICAL SKETCHES, (2) THE SEMINAR PROGRAM, (3) FORMS FOR ORGANIZING THE SEMINAR, (4) A SELECTED BIBLIOGRAPHY, (5) FORMS FOR ADMINISTERING COOPERATIVE EDUCATION, (6) A ROSTER OF THE 147 SEMINAR PARTICIPANTS, AND (7) A QUESTIONNAIRE USED TO GATHER INFORMATION FROM SELECTED COOPERATIVE EDUCATION PROGRAMS.
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The Center for Vocational and Technical Education
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The Center for Vocational and Technical Education has been established as an independent unit on The Ohio State University campus with a grant from the Division of Adult and Vocational Research, U. S. Office of Education. It serves a catalytic role in establishing a consortium to focus on relevant problems in vocational and technical education. The Center is comprehensive in its commitment and responsibility, multidisciplinary in its approach, and interinstitutional in its program.

The major objectives of The Center follow:

1. To provide continuing reappraisal of the role and function of vocational and technical education in our democratic society;
2. To stimulate and strengthen state, regional, and national programs of applied research and development directed toward the solution of pressing problems in vocational and technical education;
3. To encourage the development of research to improve vocational and technical education in institutions of higher education and other appropriate settings;
4. To conduct research studies directed toward the development of new knowledge and new applications of existing knowledge in vocational and technical education;
5. To upgrade vocational education leadership (state supervisors, teacher educators, research specialists, and others) through an advanced study and in-service education program;
6. To provide a national information retrieval, storage, and dissemination system for vocational and technical education linked with the Educational Research Information Center located in the U. S. Office of Education;
7. To provide educational opportunities for individuals contemplating foreign assignments and for leaders from other countries responsible for leadership in vocational and technical education.

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GUIDELINES FOR
COOPERATIVE EDUCATION
AND
SELECTED MATERIALS FROM THE NATIONAL
SEMINAR HELD AUGUST 1-5, 1966

A MANUAL FOR THE FURTHER
DEVELOPMENT OF COOPERATIVE EDUCATION

Harry Huffman, Coordinator
Specialist in
Business and Office Education

THE CENTER FOR VOCATIONAL AND TECHNICAL EDUCATION

THE OHIO STATE UNIVERSITY

980 Kinnear Road, Columbus, Ohio

1967

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PREFACE

The concept of cooperative education in vocational and technical education is certainly not new. However, recent trends in the world of work and in education provide compelling reasons for "sharpening" our concepts and broadening our perspective and application of this methodology to more occupational training areas and to different levels of preparation.

Toward this end and at the suggestions of state and national leaders, the National Seminar on Cooperative Education was planned for August 1 to 5, 1966, at The Center. The seminar was designed to prepare guidelines for encouraging, developing, improving, and expanding cooperative education programs for high school and post-high school youth. Personnel from the U. S. Office of Education, Division of Vocational and Technical Education, Center specialists in all of the service areas, state vocational education leaders, and other nationally recognized consultants contributed to its planning and execution. The seminar designed primarily for personnel in state leadership positions (e.g., supervision, teacher education, curriculum, research) in all of the service areas drew participants from 41 states.

This report is a distillation of the discussion, interaction, and conclusions that were drawn from the meeting. The contribution and suggestions made by seminar participants were particularly valuable. It is hoped that the report will provide material assistance to state staff members in improving and extending effective cooperative education programs in their states. A number of states have indicated plans for conducting state-wide workshops for personnel.

Special recognition is due Harry Huffman, Specialist in Business and Office Education at The Center, who served as Seminar Chairman; C. B. Hurst, Cooperative Education Consultant for The Center (formerly Director of Vocational Education, and Principal of Patterson Cooperative High School, Dayton, Ohio); and Franklin H. Dye, Research Associate in Business and Office Education at The Center.

The reviewers of the guidelines were E. Max Eddy, Professor and Chairman, Department of Industrial Education, School of Technology, Purdue University, Lafayette, Indiana; Ralph E. Mason, Chairman, Business and Distributive Education, Indiana State University, Terre Haute, Indiana; Calvin J. Cotrell, Specialist in Trade and Industrial Education, The Center for Vocational and Technical Education; and Neal E. Vivian, Specialist in Distributive Education, The Center for Vocational and Technical Education.

Robert E. Taylor
Director
The Center for Vocational and
Technical Education

FOREWORD

During the next five years there will be a tenfold increase in the number of youth involved in cooperative education. In view of this impending growth, The Center sponsored a national interdisciplinary seminar on cooperative education on August 1 to 5, 1966, for state directors and supervisors of vocational education and teacher education personnel.

The objectives of the seminar were to promote and expand the use of the principle of cooperative education by all the vocational services and through an inter-service effort to explore the possibilities of providing training for youth preparing for new and emerging occupations which require knowledge and skills from several vocational disciplines. Examples of new and emerging occupational areas include turf management, data processing, child care service, garden center management, pre-sold merchandising operations, nursing and rest home service, outdoor recreational service, supervisor of communications service, electro-mechanical service and repair, and automatic merchandising.

Speakers, small group discussions, and a specially prepared set of guidelines were used to achieve the objectives of the seminar.

The seminar focused on the cooperative education problems of all the vocational disciplines that are facing state vocational education staff, school administrators, the local community, business and industry, management, and unions.

A strong interest was exhibited by over 110 state leaders of vocational education from 41 states who braved the airline machinists' strike to attend the conference. The keynote banquet speaker was E. F. Laux, Vice President for Marketing of the Ford Motor Company. The presentations given at the conference are reproduced on the following pages. The biographical sketches of the speakers are included in the Appendix. Forms used for organizing the small groups discussions of the seminar are included in the Appendix to help state leaders plan similar conferences.

Several months before the conference a number of on-site school visits were made to gather pertinent data. Eight states were visited and the results are incorporated in the guidelines.

Harry Huffman
Seminar Chairman
The Center for Vocational and
Technical Education

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PART I INTRODUCTION

The Challenges Before Vocational and Technical Education

The most affluent society in the world, the United States, is facing the challenges of unemployment, underemployment, and poverty. Meeting these challenges, we have developed the most advanced technology known to man in the fields of agriculture, business, industry, and the home. But a paradox exists, not enough people are trained to operate, service, rebuild, and develop this mushrooming technology. In addition, there is a need for skilled people to supervise and manage employees. These employment needs combined with the demands of the military establishment present a major challenge to all agencies concerned with education and training of workers. In the October, 1964 issue of the N.E.A. Journal, J. Chester Swanson summarized the challenge to education: "Our political and social survival may depend to considerable extent upon our ability to provide for the adequate employment of our nation's youth. Although the unemployment problem is so big that it must be approached from all angles, vocational education can play a considerable part in providing a solution."

Dr. Swanson defined vocational education "as that part of a school curriculum or those on-the-job activities designed to provide the skills and knowledge which will enable the student to obtain employment or to become a more proficient worker in providing economic security for himself and his family."

Cooperative education can make a substantial contribution toward meeting this unemployment problem. Cooperative education can furnish our most promising hope for a substantial increase in occupational, vocational, and technical education at the secondary level.

Expanding Cooperative Education

Cooperative education in operation for over fifty years can be introduced into many more programs without a substantial outlay of local money. Realistic learning for thousands of young people now enrolled in comprehensive high schools, vocational-technical area schools, technical institutes, and community colleges can come through cooperative education. Its wide and favorable acceptance by leaders in education, business, and industry is based upon a constructive and functional educational philosophy. Finally, in-school instruction and on-the-job training in a cooperative program can lead to full-time employment for the student-trainee after graduation from high school. Federal funds, available through the Vocational Education Act of 1963, have prompted states and local communities to develop new programs and improve existing programs in cooperative education.

Cooperative education is a well-developed instructional program which requires a teacher-coordinator to organize the learning activities of student-trainees around their career interests and goals. He

coordinates classroom instruction with on-the-job experience. While on the job, student-trainees learn to work with adults and to develop the essential attitudes of respect and responsibility. School administrators, parents, and employers all know that cooperative education can help train young people in a wide variety of occupations. Even students realize the usefulness of cooperative education.

The number and the kinds of cooperative programs have increased in number in recent years. Yet, many communities have not utilized this practical learning approach. The educators in these communities should review the advantages of cooperative education for the student, school, employer, and community so that the educational needs of the young people can be met.

Plan for the Future

According to the Panel of Consultants on Vocational Education, eight out of ten youngsters now in grade schools will not complete college. This need for practical and meaningful programs to satisfy the educational requirements of those who do not complete college can be met by providing a wide range of learning opportunities for students in every ability level. When learning opportunities are increased the number of drop-outs should be reduced. Learning opportunities can be increased in a program which includes:

1. A complete guidance program which includes a survey of interests, counseling, testing, and adequate school records.
2. A solid foundation of general education to serve as the base for specialized instruction for an occupation or profession.
3. An adequate program of industrial arts, home economics, general business, and general agriculture to provide realistic exploratory experiences in all major fields of employment.
4. A complete program to develop the pre-employment skills required in the agricultural, home economics, office procedures, sales and service vocations, and industrial occupations.
5. An adequate cooperative education program to assist young people to enter productive employment.

It is obvious that we need an expansion of all types of "practical" education to meet the varied needs of young people. In most situations, it is not enough to have one or two cooperative programs in a comprehensive high school. We need a total vocational program in which the cooperative phase is only a part.

Interrelated Services Important

In the years ahead we should give more attention to the ways and means of utilizing all the vocational services to satisfy the educational needs of youths and adults. Attention should be given not only to the expansion of existing programs of agricultural, distributive, trade and industrial, office, and home economics education, but also to the development of new instructional patterns which can interrelate course content from two or more vocational disciplines. The emphasis, therefore, should be less on course content and more on the job needs of the student so that he can perform effectively on the job. For example, if a trade and industrial student learning the skills of automotive service needs instruction in selling, provision should be made to teach him the selling skills. If a distributive education student needs instruction in office operation, instruction in office skills should be provided. Numerous interrelationships exist between sales, service, production, and distribution. The principal ingredient needed to bring about a strong program of interrelated services is "cooperation" and a vital concern for the development of a functional program of vocational and technical education.

Investment in Individual Development

All education is an investment in the development of the whole individual. Better educated people make a substantial contribution to the work force because they:¹

1. learn more and earn more;
2. produce more and achieve more;
3. require fewer tax supported public services;
4. have more information and facts upon which to base important decisions;
5. adapt more readily to new developments and new ideas and new methods;
6. appreciate and buy more new products and services;
7. have more faith in a free market economy and our competitive economic system;
8. participate more in representative government.

On the other hand, the uneducated are often dependent upon society for the bare necessities of life, which affects the economy of their community.

¹Adapted from Special Supplement, Washington Report, August 24, 1962, Chamber of Commerce.

Description and Objectives of Cooperative Education

Distinction Between Work-Experience Programs and Cooperative Education

In the minds of some people cooperative education is not greatly distinguished from work-experience education. A fairly clear differentiation can be made.

Work-experience education has a number of diffuse, general objectives. For example, work experience has been introduced in a variety of worthwhile educational programs conducted for various purposes and in different forms. These programs would be individually defined according to their nature, purpose, procedures, and substance and range from efforts to propose new approaches to curricula.

The cooperative program, which also contains the element of work experience, is specifically defined. It is a program of vocational education developed jointly by the school and business or industry in which job skills and job adjustment are secured through an organized sequence of job experiences in paid part-time employment and through classroom experiences in related instruction.

Uniquely, cooperative education helps the student to:

1. Select an appropriate field of work or an occupation;
2. Learn skills of an occupation under actual conditions of an employment and production;
3. Gain technical and related information which will enable the learner to engage in the work of the chosen occupation intelligently, safely, and confidently;
4. Make adjustment to the real employment setting including responsibilities, relations with other workers, and acceptance of supervision;
5. Make optimal application of school learning to a vocation and of job learning to school work;
6. Learn to assume adult responsibilities in work, in relation to peers, and in his community.

Seven Types of Cooperative Programs

1. Cooperative Programs in Business and Office Education

Cooperative office programs provide classroom instruction and on-the-job training to develop vocational competency in office skills, knowledges, and understandings. These programs are intended to prepare the student for initial employment and for

advancement on the job. Given prior to the time of employment at a training station, the instruction includes courses such as type-writing, shorthand, transcription, bookkeeping, and machine operation. During the time of training-station employment, the student's classroom work includes directly related instruction such as office procedures, which includes clerical procedures; calculating, duplicating, and transcribing machines; filing; cashier, sales, purchases, payroll, and stockroom procedures; and business correspondence and other communications.

2. Cooperative Programs in Distributive Education

Cooperative programs in distributive education are designed to prepare students for entry occupations and for promotion to positions of increased responsibility in the various areas of marketing, including wholesaling, retailing, and service industries. The programs take several forms, but most commonly, the students are employed at training stations on a half-day basis during their senior year in high school. In some cases the necessary courses in marketing and salesmanship are completed in the junior year as pre-employment classes, followed by related instruction and on-the-job training in the senior year.

Senior high school programs primarily utilize retail store training placements. Post-high school and community college programs use wholesale businesses, big-ticket departments of retail stores, and direct sales placements.

3. Cooperative Programs in Home Economics

In home economics, increased emphasis is now being placed on program development specifically geared to preparing students for employment. Typical occupations for which cooperative home economics programs are used include the food service area, clothing maintenance, hotel and motel service, and child care. The main objectives of cooperative education efforts in home economics are: to prepare students to obtain specific jobs using the technical skills of home economics; to assist students in developing personal characteristics that are necessary in the world of work; to alert students to the possible job opportunities in the home economics field; and to help business and industry become aware of the assistance that the school can give through cooperative job training in home economics related occupations.

4. Cooperative Programs in Trade and Industrial Education

Cooperative programs in industrial education are designed to prepare students for entry jobs in the skilled trades or other skilled industrial occupations.

The in-school phase involves instruction in both general employment information common to all vocations and trade theory which is applicable to the occupation or trade in which the student is employed. The emphasis is on the acquisition of specialized skills and knowledge needed for trades which demand in-depth instruction. These programs are sometimes called Diversified Cooperative Training (D.C.T.) or Industrial Cooperative Training (I.C.T.) because the students in one class are employed in training stations representing several different trades.

In some large cities or in area schools, instruction may be organized according to trade areas or by occupational families, e.g., automotive, drafting, and printing. In these schools the teacher-coordinator may teach the pre-vocational (sometimes called pre-employment) classes or tenth grade shop and the related technical information for those who are employed on a cooperative job. Under this plan the vocational drafting teacher-coordinator would teach the tenth year pre-vocational students two or three periods and the eleventh or twelfth year employed students one period each day. An important part of the school day must be devoted to on-the-job coordination. Usually such programs follow the alternating plan where the student is in school one, two, or three weeks and on the cooperative job a similar period.

Cooperative programs in industrial education may be suggested for those who wish to pursue a college major in industrial education; those who plan to enroll in industrial or technical programs on the post-high school level; and those who want to work full time immediately following high school graduation.

5. Cooperative Off-Farm Agriculture Programs

There are many occupations in which agricultural competencies are needed in addition to farming. Examples include: elevator operations, farm equipment, feed and fertilizer sales, farm produce, and livestock brokerage operation. On-the-job, supervised occupational experience in conjunction with related classroom learning experiences can be one of the answers to providing competent people for their entry into agriculture-related off-farm occupations. Provisions of the Vocational Education Act of 1963 have increased the number of schools providing programs of this type; these can be developed for area schools and community colleges as well as local high schools.

6. Combination or Interrelated Cooperative Programs

In many communities, cooperative programs are in operation which involve students employed in several vocational fields, including the office, distributive, trade and industrial, off-farm agricultural, and home economics-oriented occupations. In some states these programs are called diversified vocational programs. In other states these are called cooperative occupational education programs. Programs of this type are best suited to small

high schools in rural areas where there are neither enough students nor enough acceptable training stations in single occupational areas to justify separate programs.

Although interrelated or diversified programs embody the basic principles common to all cooperative education programs, some special problems do exist. To operate a program that is truly vocational cooperative, directly related instruction in the classroom must be coordinated with the on-the-job experiences. The coordinator must be familiar with and have had work experience in several vocational fields. In addition there is the problem of developing and using the great variety of individualized instructional materials that must supplant the usual group methods used in specific or unit type programs.

7. Special Purpose Programs

As school administrators learn more about the advantages and the operating details of cooperative education, we will see more special purpose programs developed. An example of this type may be found in a specialized program organized to train gasoline station attendants. Such programs involve instruction from the trade and industrial field as well as sales and service. It is also advisable to include recordkeeping, typing, or similar business office skills.

"Special purpose" cooperative programs might be considered for physically handicapped, retarded, and inter-city youth.

Common Elements in All Cooperative Education

A major thesis of these guidelines for cooperative education is that a great commonality exists in vocational cooperative programs. The overriding purpose is to develop occupational competence through classroom work carefully coordinated with on-the-job experiences.

Many other concepts are an integral part of cooperative education. These include (1) paid employment whereby the student-employee experiences are that of a full-fledged employee rather than as an observer or aid, (2) the employment of a teacher-coordinator especially trained in coordination techniques with experiences in the vocational fields for which he is responsible for instructing and guiding a student-trainee, and (3) the use of consulting or advisory committees in order to bring joint thought and planning to bear on school and community problems.

Business and distributive fields are being combined with agriculture to develop many fine agricultural business cooperative programs. In several places around the country, home economics programs are being developed in connection with other service areas. This adheres to the "student centered" approach which is inherent in the Vocational Education Act of 1963 and can probably be the area in which cooperative education will make its greatest contribution to the further development of a total program of vocational and technical education.

Advantages of the Cooperative Plan to the
Student, School, Employer, and Community

The Student

1. Provides a realistic learning setting in which the student may discover his true interests and abilities.
2. Develops a good understanding of employment opportunities and responsibilities through direct on-the-job experience.
3. Exposes students to basic information regarding business, industry, and off-farm agriculture needed for intelligent life choices.
4. Develops work habits and attitudes necessary for individual maturity and job competence.
5. Provides a laboratory for developing marketable skills.
6. Gives meaning and purpose to the theoretical and practice assignments presented in the school situation.
7. Provides first-hand experience with other employees which leads to a better understanding of the human factors in business and industry.
8. Provides financial rewards while learning employment skills and understanding.
9. Provides an opportunity to participate in and profit by two types of learning environment--school life and employment.
10. Provides an effective test of aptitude for chosen field of work.

The School

1. Enlarges the learning facilities available for students enrolled without a major expenditure for shop and laboratory equipment.
2. Brings business, industry, agriculture, and the school together in a training effort to develop a strong vocational program.
3. Brings to the school at a low per capita cost a wealth of social and technical information which may be used as the basis for effective instruction for the varied needs of the students.
4. Gives the school an effective means of evaluating its over-all instructional program.
5. Increases the holding power of the school by helping students clarify career goals and providing a practical means of reaching them.

The Employer

1. The employer becomes a partner in selecting, instructing, and training young workers in the skills and understandings needed for effective job performance.
2. The employer has the assistance of the school in instructing and counseling the cooperative student during the transition and adjustment period from school to the job.
3. As follow-up studies show, employers retain a large percent of cooperative students after graduation in positions of real responsibility and leadership.
4. Employers participate in keeping in-school and on-the-job instruction consistent with current practice in business, industry, and agriculture.
5. Employers are a source of new workers who are receptive to instruction.
6. Employers have the advantage of hiring workers with a basic understanding of the technology of the trade, including advanced mathematics and applied science, which give the worker the "know-why" as well as the "know-how."
7. Employers are supplied with selected and motivated workers who have chosen a career in keeping with their interests and aptitudes.
8. Employers are often relieved of some of their training problems.
9. Employers are provided an opportunity to render an important public service.

The Community

1. Provides an effective means of developing young people for productive citizenship in the community.
2. Increases the economic health of the community as companies are able to meet their needs for skilled workers.
3. Provides a method of introducing high school students to the local employment opportunities.
4. Provides an opportunity to develop a unified community training program.
5. Provides specialized training in a variety of occupations at a reasonable cost to the community.
6. Promotes closer cooperation and understanding between the community and its schools.
7. Encourages students to remain in the home community after graduation and promotes a more stable work force.

A Chronological History of Cooperative Education and
Federal Legislation Affecting Cooperative Education

- 1906 - Cooperative education inaugurated at the University of Cincinnati by Dean Herman Schneider. The first program in engineering was a combination of work and study as integral parts of the educative process.
- 1909 - High school program of work experience education established at Fitchburg, Massachusetts, in cooperation with the General Electric Company.
- 1910 - High school cooperative courses established in the Cincinnati, Ohio public schools.
- 1911 - Experimental high school cooperative program established at York, Pennsylvania.
- 1912 - First retail cooperative training program in Boston, Massachusetts high schools organized by Mrs. Lucinda Wyman Prince.
- 1914 - High school cooperative instruction established at Dayton Cooperative High School, Dayton, Ohio.
- 1915 - High school cooperative programs established in ten New York City schools.
- 1917 - Passage of Smith-Hughes Act, Public Law 347, 64th Congress. Approved February 23, 1917, a month and a half before U. S. entered World War I. Provided approximately \$7 million annually, as a permanent appropriation for vocational education in agriculture, trades and industry, home economics, and teacher training. The Federal Board of Vocational Education recognized cooperative courses and encouraged schools to establish these courses.
- 1921 - College plan of alternating study and work periods adopted by Antioch College, Yellow Springs, Ohio. This plan is currently in use at over 75 colleges.
- 1929 - Passage of George-Reed Act, Public Law 702, 70th Congress. Approved February 5, 1929. A temporary measure that authorized increase of \$1 million annually for four years (1930-1934) to expand vocational education in agriculture and home economics.
- 1931 - Modification of policy for part-time cooperative courses by the Federal Board for Vocational Education.
- 1933 - Conference at Biloxi, Mississippi arranged by C. E. Rakestraw. From this conference, plans were developed for expanding part-time cooperative education programs.

- 1934 - Passage of George-Elzey Act, Public Law 247, 73rd Congress. Replaced the George Reed Act of 1929. Approved May 21, 1934. Authorized an appropriation of \$3 million annually for three years, to be apportioned equally for training in agriculture, home economics, and trades and industry.
- 1936 - Passage of George-Deen Act, Public Law 673, 74th Congress. Approved June 8, 1936. Authorized on a continuing basis an annual appropriation of approximately \$14 million for vocational education in agriculture, home economics, trades and industry, and for the first time, distributive occupations.
- 1946 - Passage of George-Barden Act, Public Law 586, 79th Congress. Amended and superseded the George-Deen Act of 1936. Approved August 1, 1946. Authorized larger appropriation for vocational education than the superseded George-Deen Act of 1936, from \$14 million to \$29 million annually. Extended provisions of the Smith-Hughes Act and authorized increased annual appropriations to the States. Funds for vocational education were authorized for agriculture, home economics, trades and industry, and distributive occupations.
- 1957 - Conference on Cooperative Education and the Impending Educational Crisis held at Dayton, Ohio, on May 23 and 24. Conference was sponsored by the Thomas Alva Edison Foundation.
- 1963 - Passage of Vocational Education Act, Public Law 88-210, 88th Congress. The central purposes of the Act are as follows:¹
1. To assist states to maintain, extend, and improve existing programs of vocational education.
 2. To develop new programs of vocational education.
 3. To provide part-time employment for youths who need such employment in order to continue their vocational training on a full-time basis.
 4. To provide instruction so that persons of all ages in all communities will have ready access to vocational training or retraining which is of high quality, realistic in relation to employment, and suited to the needs, interests, and ability of the persons concerned. Such persons were identified: (a) those in high school, (b) those who have completed or discontinued formal education

¹Vocational Education, The Sixty-fourth Yearbook of the National Society for the Study of Education, Part I, Chicago: The National Society for the Study of Education (5835 Kimbark Avenue, Chicago, Illinois, 60637), p. 200.

and are preparing to enter the labor market, (c) those who have already entered the labor market and who need to upgrade their skills or learn new ones, and (d) those with educational handicaps.

The foregoing Federal acts contributed substantially to the philosophy, organization, and growth of vocational education which included cooperative education.

Definitions Relating to Cooperative Education*

The following definitions will help to clarify the meaning of terms relating to cooperative education:

ADVISORY COMMITTEE - a group of persons, usually outside the educational profession, selected for the purpose of offering advice and counsel to the school regarding the vocational program. Members are representatives of the people who are interested in the activities with which the vocational program is concerned. (See also Craft Advisory Committee.)

COOPERATIVE EDUCATION - a program for persons who are enrolled in a school and who, through a cooperative arrangement between the school and employers, receive part-time vocational instruction in the school and on-the-job training through part-time employment. It provides for alternation of study in school with a job in industry, agriculture, home economics related, or business, the two experiences being planned and supervised by school and employer so that each contributes definitely to the student's development in his chosen occupation. Work periods and school attendance may be on alternate days, weeks, or other periods of time, but the hours at work are during the school day and equal or exceed the hours spent in school during the regular school year. This plan of training is used extensively in various phases of vocational education.

COORDINATING TEACHER (TEACHER-COORDINATOR) - a member of the school staff who teaches the related and technical subject matter involved in work-experience programs and coordinates classroom instruction with on-the-job training.

COORDINATOR (COOPERATIVE EDUCATION) - a member of the school staff responsible for administering the school program and resolving all problems that arise between the school regulations and the on-the-job activities of the employed student. The coordinator acts as liaison between the school and employers in programs of cooperative education or other part-time job training.

*Definitions are taken from Definitions of Terms in Vocational, Technical, and Practical Arts Education, an American Vocational Association publication.

CRAFT ADVISORY COMMITTEE - a group of local craftsmen, selected from a specific trade or occupation, appointed to advise the school on matters pertaining to teaching the particular occupation. Generally, the committee should include an equal number of representatives of labor and management.

DIVERSIFIED OCCUPATIONS PROGRAM - a high school course in which students are given supervised work experience in any one of a variety of occupations, combined with related classroom instruction. This type of program is suited especially to communities where the need for workers is too limited to justify separate courses for each occupation. This program is usually under the direction of the trade and industrial education division and supervised by a teacher-coordinator.

ON-THE-JOB TRAINING - instruction in the performance of a job given to an employed worker by the employer during the usual working hours of the occupation. Usually the minimum or beginning wage is paid.

WORK EXPERIENCE - employment undertaken by a student while attending school. The job may be designed to provide practical experience of a general character in the work-a-day world.

WORK EXPERIENCE EDUCATION (OCCUPATIONAL EXPERIENCE) - employment undertaken as part of the requirements of a school and designed to provide planned experiences, in the chosen occupation, which are supervised by a teacher-coordinator and the employer.

WORK STUDY PROGRAM - administered by the local educational agency and made reasonably (to the extent of available funds) to all eligible youths in the area served by such agency. Employment under the program may be for the local educational agency or some other public agency or institution and will be furnished only to students who (a) have been accepted for enrollment as full-time students in an approved vocational education program, (b) need earnings to continue their vocational education, and (c) are at least 15 and less than 21 years of age. No student shall be employed under the program more than 15 hours in any class week or paid more than \$45 in any month or \$350 in any academic year, except in special cases.

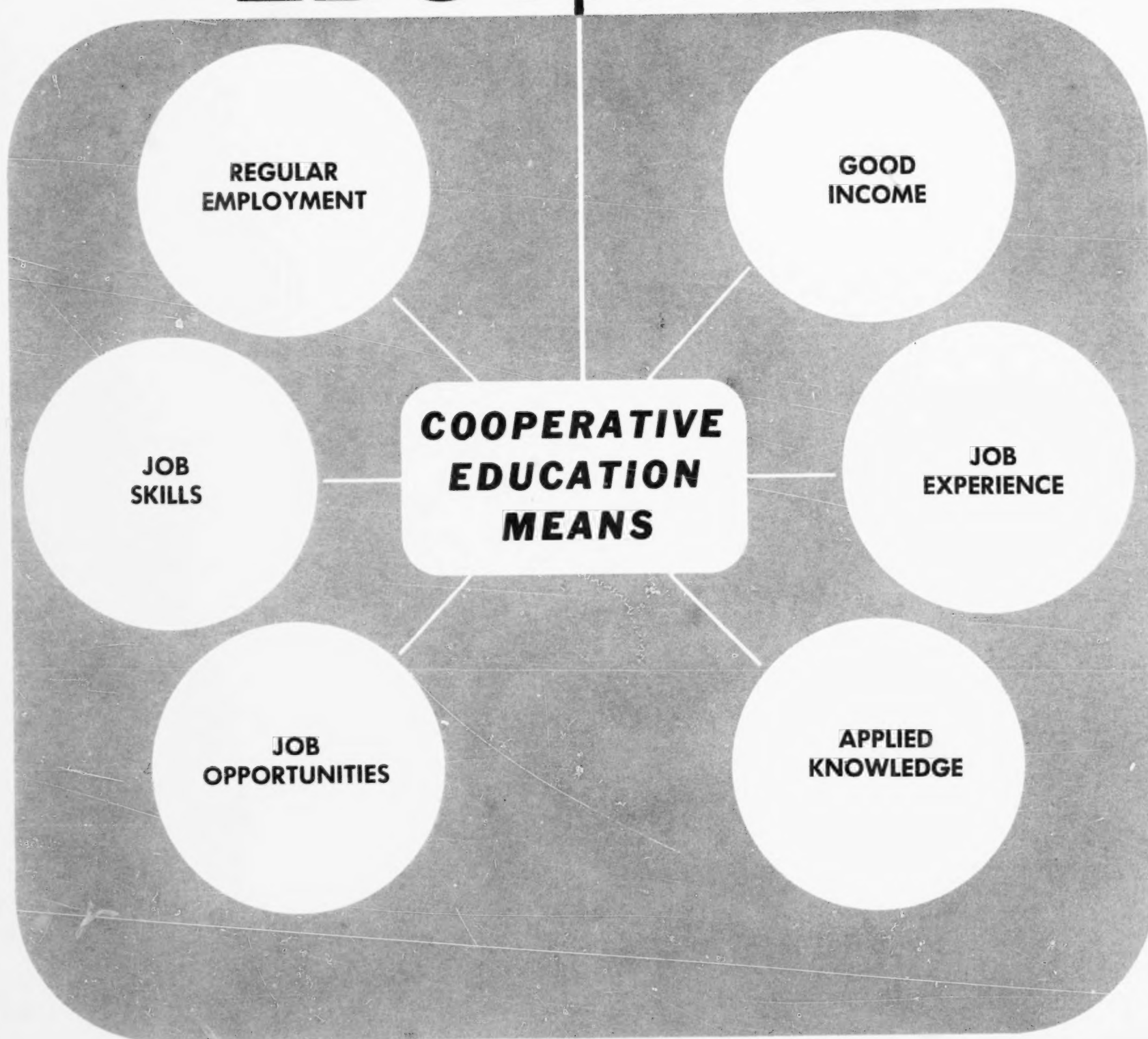
VISUAL AIDS EXPLAINING COOPERATIVE EDUCATION

The following visual aids can be used to make transparencies for presenting major concepts about cooperative education.

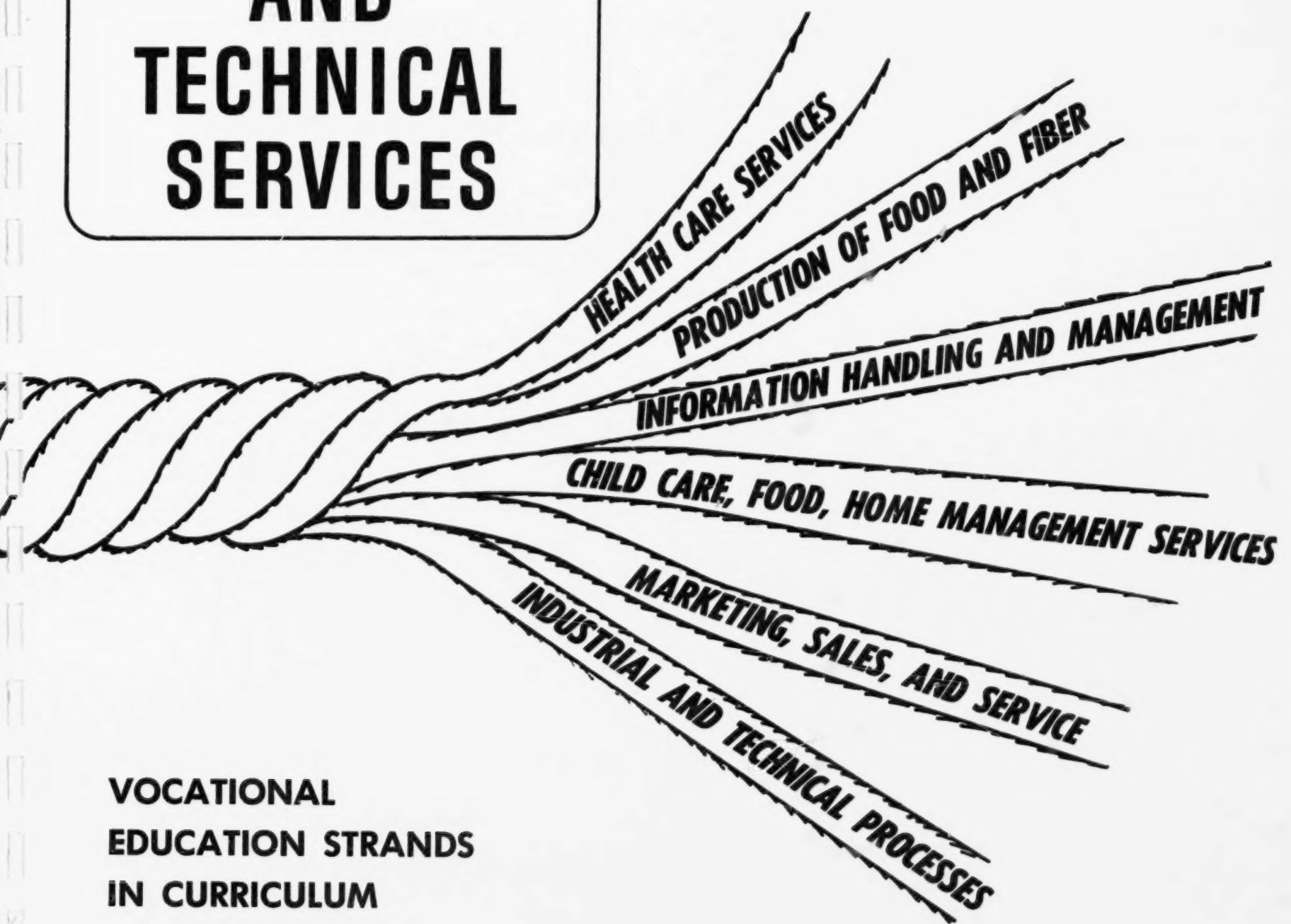
1. Values of Cooperative Education
2. Vocational Education Strands in Curriculum Development
3. Student Growth through Cooperative Education
4. Alternate School-Work Plan
5. The Teacher-Coordinator in Cooperative Education
6. The Results of Good and Poor Coordination
7. Values of Vocational Experiences

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VALUES OF COOPERATIVE EDUCATION



INTERRELATED VOCATIONAL AND TECHNICAL SERVICES



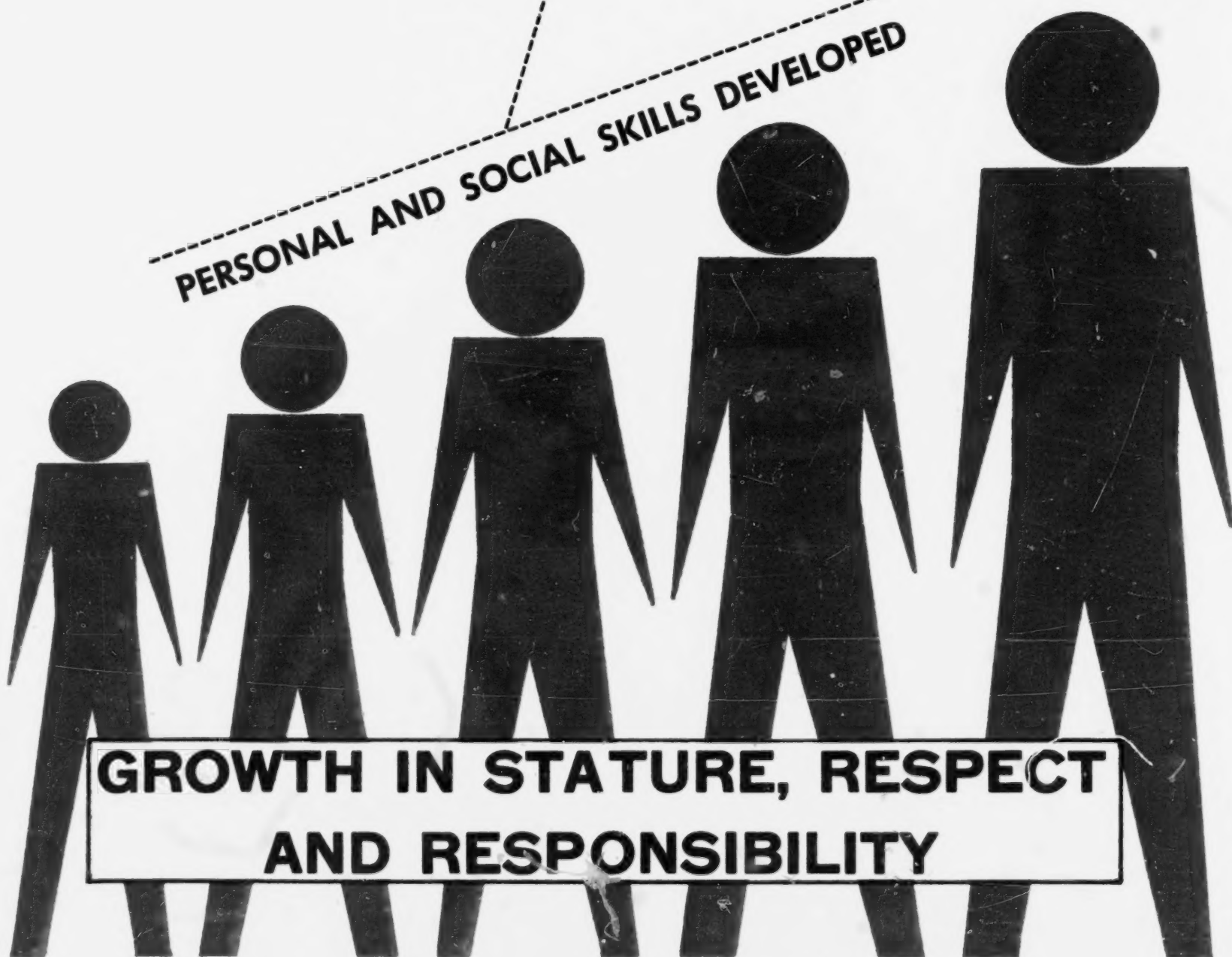
**VOCATIONAL
EDUCATION STRANDS
IN CURRICULUM
DEVELOPMENT**

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STUDENT GROWTH THROUGH COOPERATIVE EDUCATION

ENLARGING WORLD OF WORK

PERSONAL AND SOCIAL SKILLS DEVELOPED



**GROWTH IN STATURE, RESPECT
AND RESPONSIBILITY**

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**PERSONAL AND SOCIAL SKILLS DEVELOPED
IN KEEPING WITH INTERESTS AND AMBITION**

ALTERNATE SCHOOL -WORK PLAN



Balanced Learning In School and On-The-Job

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The Teacher-Coordinator In COOPERATIVE EDUCATION

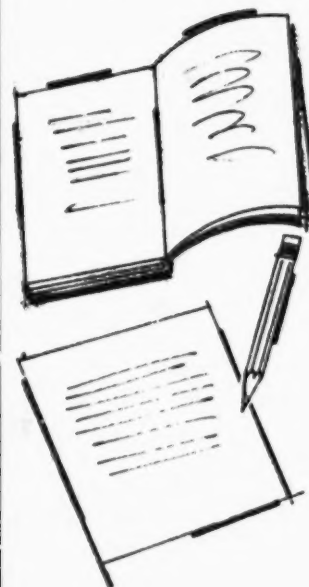
COUNSELING



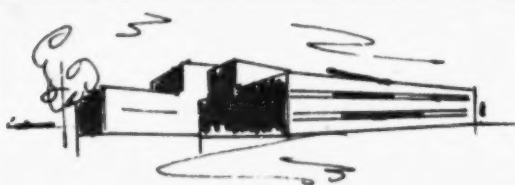
PLANNING



TEACHING



PLACEMENT



FOLLOW - UP

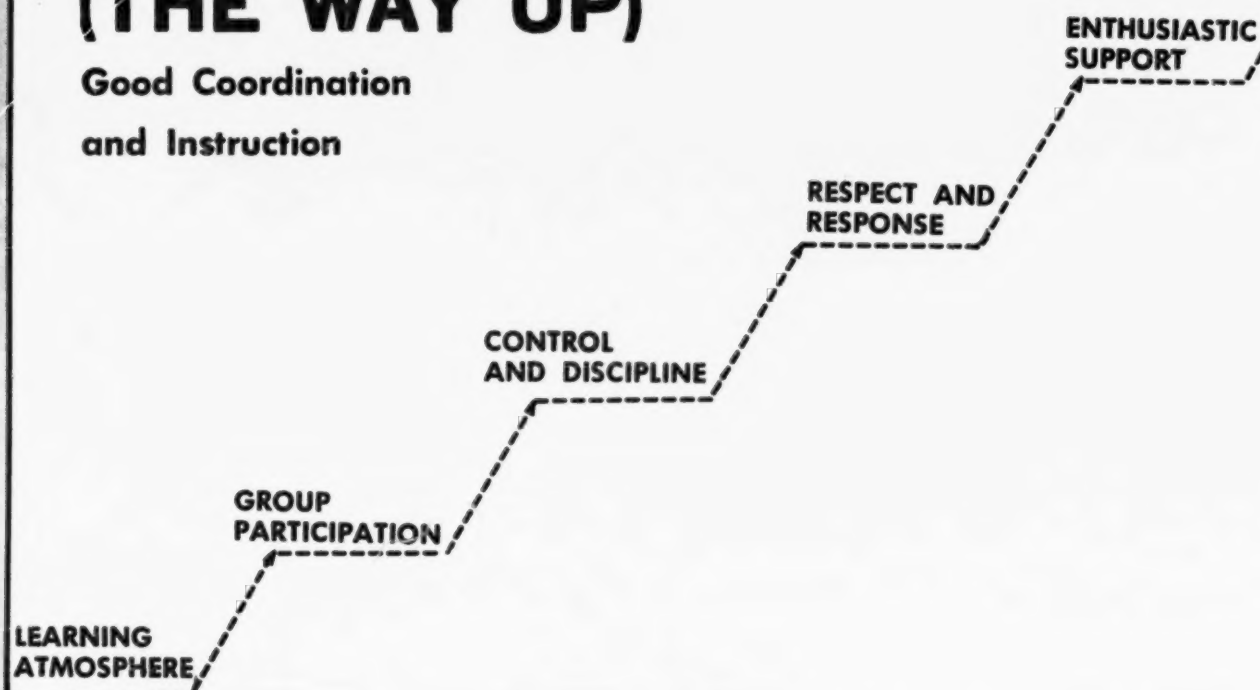


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THE RESULTS OF GOOD AND POOR COORDINATION

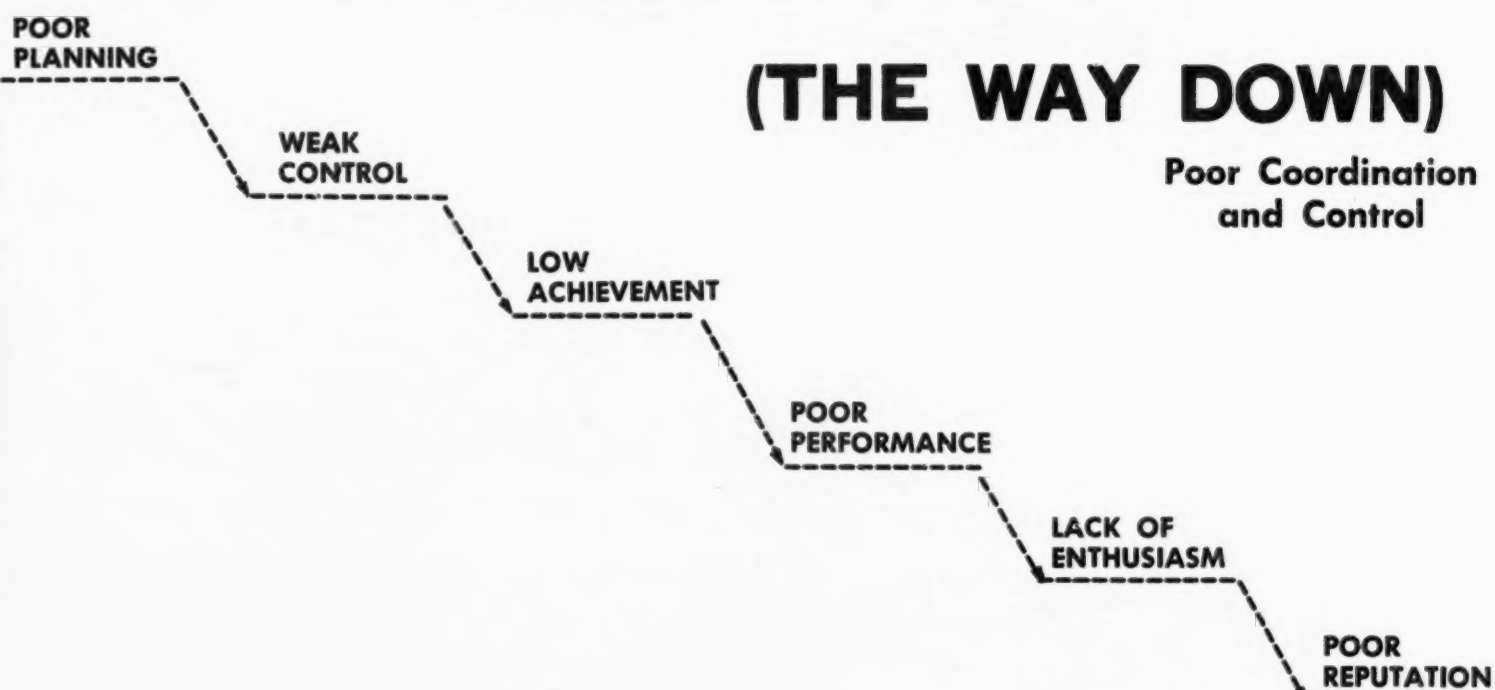
(THE WAY UP)

Good Coordination
and Instruction



(THE WAY DOWN)

Poor Coordination
and Control



**VALUES OF
VOCATIONAL EXPERIENCES**

**LECTURES
ON
VOCATIONS**

ADAPTED FROM "CONE OF EXPERIENCE" FROM
AUDIO VISUAL METHODS OF TEACHING BY
EDGAR DALE, USED WITH PERMISSION
OF THE AUTHOR.

**DISCUSSING JOB
INFORMATION**

VOCATIONAL FILMS

**VISITING BUSINESS AND
INDUSTRIAL EXHIBITS**

**VISITING PLACES OF
EMPLOYMENT**

**STUDY OF RELATED
TECHNICAL INFORMATION**

**INSTRUCTION AND PRACTICE
IN COMMON SKILLS**

INSTRUCTION IN PRE-EMPLOYMENT SKILLS & KNOWLEDGE

DIRECT, PURPOSEFUL ON-THE-JOB EXPERIENCE

(DIRECT EXPERIENCE = GREATEST VALUE)

PART II GUIDELINES FOR COOPERATIVE PROGRAMS

The guidelines in this manual have been prepared to help state staff members define and discuss the place and function of cooperative education in the total school curriculum. They should also be of value to teacher-educators for the preparation of teacher-coordinators. The specific purposes of the guidelines are:

1. To define and clarify the common elements in all cooperative education programs
2. To serve as a guide for the further development of material needed by state staff members and area and local supervisors when they explain, define, and clarify the local plan of cooperative education
3. To encourage the further expansion of cooperative education in schools not being adequately served by vocational programs at the present time
4. To serve as a point of departure in organizing state and area conferences on cooperative education
5. To encourage the development of instructional materials which will strengthen existing cooperative education programs and furnish adequate instructional aids for new programs
6. To encourage the further development of interrelated cooperative programs and foster a close working relationship between all vocational services in expanding cooperative education

It is hoped that the materials of this manual can be useful for planning state workshops. There are no restrictions on duplicating this material.

The guidelines are organized in five sections as follows:

- The School
- The Teacher-Coordinator
- The Program
- The Student-Trainee
- The Employer

GUIDELINES ABOUT THE SCHOOL

1. Guidance and Counseling Function of the School
2. Development of Student Personnel Records

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GUIDELINE NO. 1

Guidance and Counseling Function of the School

Guideline

The guidance and counseling program should assist cooperative education students in choosing and following suitable training objectives.

Explanation

Guidance services are involved in nearly every phase of the cooperative education program. Although there should be cooperation between the guidance counselor and the teacher-coordinator, the primary responsibility of enrollment, placement, and follow-up rests with the teacher-coordinator. His effectiveness is evaluated in terms of successful training and adjustment of the students in his program.

Implementation

1. Effective Counseling--The guidance counselor and teacher-coordinator should help each student to recognize his special interests and aptitudes through an interpretation of his school records, background, and his inventory and test profile.
2. Selection of Students--The teacher-coordinator should work closely with the guidance counselor in the selection of students for the cooperative program.
3. Enrollment Procedure--The enrollment procedure should be well defined and understood by all concerned. They should know the factors which determine student selection and placement.
4. Parental Approval--The teacher-coordinator should confer with parents about the factors relating to vocational choice and career planning.
5. Periodic Counseling--The teacher-coordinator should review periodically with the students their (a) career objectives, (b) achievement in relationship to aptitude and ability, (c) personal and social development, and (d) job performance record.
6. Job Placement--The teacher-coordinator should maintain a current file of job opportunities available to graduates.
7. Follow-Up--The teacher-coordinator should maintain a follow-up file of the graduates from the cooperative education program.

GUIDELINE NO. 2

Development of Student Personnel Records

Guideline

The student personnel records should contain the kinds of information needed by the teacher-coordinator for conducting a cooperative education program.

Explanation

The personnel record is the central source of important information about the students. It contains personal data, scholastic information, test results, extra-curricular participation, career objectives, and job training experience. It is of great value to the school administration in planning a school program that will meet the needs of the students enrolled; to the teacher-coordinator who assumes the multiple roles as teacher, counselor, placement director, and employment supervisor; and to the guidance counselor who will need data to assist in effective counseling.

Implementation

1. Personal Data--Personal data should include: (a) the name, nickname, home address, sex, date and place of birth of the student; (b) the names, addresses of parents, or guardian, their birthplace, marital and educational status; (c) the names and ages of brothers and sisters; (d) a summary of health information including hearing, sight, speech, disabilities, and immunization data of the student.
2. Scholastic Information--The scholastic information typically includes school attendance beginning in the elementary grades and grades earned.
3. Test Results--Test results should contain information about achievement, interests, aptitudes, and mental maturity.
4. Extra-Curricular Participation--The record should include information about the student's participation in school activities, athletics and out-of-school functions, including offices held, honors, and other special awards. It should also record interests, noteworthy attributes, and special skills of the student.
5. Career Objectives--The student's future and intermediate goals should be reported.
6. Job-Training Experience--The teacher-coordinator should be familiar with the complete record of each student. He should add information about the student's adjustment on the cooperative job, family visits, placement information, and a follow-up record.

GUIDELINES ABOUT THE TEACHER-COORDINATOR

3. Characteristics and Qualifications of the Teacher-Coordinator
4. Preparation and Certification of Teacher-Coordination
5. Duties and Responsibilities of the Teacher-Coordinator

GUIDELINE NO. 3

Characteristics and Qualifications of the Teacher-Coordinator

Guideline

A teacher-coordinator should have the personal and professional qualifications needed to organize, administer, and conduct an effective cooperative education program.

Explanation

To be successful, a teacher-coordinator must establish goals worthy for self-improvement. He must also be constantly aware of the relationships that are inherent in the teacher-student learning situation.

Teacher-coordinators should bring to their jobs the required experience and training. In every instance they should supplement their employment experience and teaching and counseling skills with continuous in-service improvement.

Implementation

1. Formal Education--He should have completed a bachelor's degree or the equivalent as a minimum professional requirement.
2. Employment Experience--He should have employment experience closely related to the occupations represented in his cooperative program. Some authorities recommend two or more years. A variety of employment experience should be required of a coordinator of a diversified cooperative program.
3. Purposeful Outlook--He should have a sincere desire to assist young people in developing into competent employees.
4. Skill as a Teacher--He should have a record of successful teaching experience and a desire to further perfect his teaching skills.
5. Role as a Teacher--He should constructively relate the cooperative program to other areas of basic instruction in the total school program and to teach what is needed when it is most meaningful to the student.
6. Role as a Teacher-Coordinator--He should be thoroughly convinced of the importance of his role as teacher-coordinator.
7. Personal Traits--He should be prompt, respectful, courteous, sympathetic, and consistent in all of his dealings. He must also be a good organizer not only of instruction but also of records, reports, and other details of the program.

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8. Knowledge of Job Requirements--He should be familiar with job requirements, lines of advancement, and the job competencies required for each level of advancement.
9. Extra-School Duties--He should reflect an attitude of helpfulness and with other members of the faculty be willing to assume extra-school duties.
10. Physical and Mental Stamina--He should have sufficient physical and mental stamina to discharge his duties effectively.
11. Public Relations--He should be able to maintain effective public relations for the cooperative education program.

GUIDELINE NO. 4

Preparation and Certification of Teacher-Coordination

Guideline

All teacher-coordinators should have adequate preparation and meet certification standards established by the appropriate state agency.

Explanation

Certification requirements for teacher-coordinators should be similar for all service areas in vocational education. The common elements found in all cooperative programs should be emphasized.

Some states require that specified courses be completed before an applicant will be considered for the teacher-coordinator's position. Other states permit certified teachers who are preparing to be teacher-coordinators to take some required courses in pre-service workshops during the summer months and other required courses through in-service study concurrent with employment.

Implementation

1. Certification Requirements--Certification requirements should be based on the needs of the teacher-coordinator as a result of job analysis. They should also define the prerequisite teaching and employment experience.
2. Teacher Education--The teacher education program to prepare the teacher-coordinator for certification should include:
 - a. the principles, practices, and philosophy of vocational and technical education, and
 - b. curriculum development, survey techniques, study of recruitment, student selection and counseling, placement

- and follow-up of trainees, job analysis, job adjustment, methods of individual and group instruction, and student and program evaluation.
3. In-service Improvement--In-service education to improve the effectiveness of the teacher-coordinator should be provided by colleges and universities in cooperation with the state department of education.
 4. Follow-up of New Coordinator--Representatives from the teacher-education institution and the state staff should follow up the new teacher-coordinator and provide assistance in setting up or adjusting to the cooperative program.
 5. Cooperative Education Workshop--The state operating manual for vocational education should provide for at least one cooperative education workshop a year involving the teacher-educators, state supervisors, local supervisors, teacher-coordinators, and administrators.
 6. Recruitment of Teacher-Coordinators--The local school and the teacher education institution should work together in the recruitment and training of prospective teacher-coordinators.

GUIDELINE NO. 5

Duties and Responsibilities of the Teacher-Coordinator

Guideline

The duties and responsibilities of teacher-coordinators should be defined in terms of the objectives and policies of cooperative education.

Explanation

The nature and extent of the teacher-coordinator's duties and responsibilities involve skills in planning, counseling, teaching, placing, and supervising students in training stations, and making follow-up studies to evaluate the student's performance.

The teacher-coordinator's duties are so varied that he should develop a daily schedule to help him complete his work. Such a schedule will provide evidence to the school administration that the assigned coordination time has been well spent.

Implementation

1. Budget--Assist in preparing the cooperative education budget.
2. Advisory Committee--Meet and work with a Cooperative Education Advisory Committee.
3. Community Survey--Conduct a community survey to ascertain local training needs.
4. Public Relations--Inform faculty, students, and community about the program.
5. Reports--Make and submit necessary local and state reports.
6. Room Library--Maintain a library for related instruction.
7. Guidance and Counseling Services--Provide vocational guidance services for students interested in cooperative education, and counsel students about personal and training problems.
8. Parental Conferences--Conduct conferences with parents to explain the program.
9. Selection of Students--Select students for the program considering their interests, their vocational plans, and their ability to profit from the instruction.
10. Selection of Training Stations--(a) Find local employers who will cooperate with the school in training students and (b) develop for each student a training plan in cooperation with his on-the-job supervisor.
11. Training Agreement--Obtain agreement and signatures to the training agreement by student, employer, school representative, and parents.
12. Related In-School Instruction--(a) Provide general and specific related instruction for student-trainees in at least one school period daily; (b) coordinate in-school instruction with the students' on-the-job experience; and (c) provide organized instructional materials for specific related phases of the students' related instruction.
13. Supervisory Visits--Make supervisory visits to students' training stations to evaluate students' progress; allocate a minimum amount of time per student per week to coordination.
14. Appointment Schedule--Should develop and file an itinerary providing information where he may be reached.
15. Employer Conferences--Confer with students' on-the-job supervisor at regular intervals to check students' progress.

16. Youth Group Activities--Organize and sponsor co-curricular activities for youth enrolled in Cooperative Education.
17. Public Relations--See Guideline 9.
18. Self-Improvement--Attend professional workshop and conferences.
19. Participation in Professional Organizations--Maintain active membership in professional organizations.
20. Follow-up Studies--Conduct regular follow-up studies of co-operative education graduates.

GUIDELINES ABOUT THE PROGRAM

6. A Plan for Initiating and Organizing a Cooperative Program
7. Local School Policies Relative to Cooperative Education
8. Advisory Committees
9. Public Relations Activities
10. Teaching Facilities
11. In-School Instruction
12. On-The-Job Instruction
13. Evaluation of Training

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GUIDELINE NO. 6

A Plan for Initiating and Organizing a Cooperative Program

Guideline

The procedures for developing a cooperative education program should be outlined in a written plan.

Explanation

The educational values of cooperative education, rather than the earnings, should be stressed with the superintendent, principal, counselors, employers, and members of the advisory committee.

A sequence of activities should give direction when organizing a new cooperative education program. The sequence should vary with the type of community and program. Few of the steps listed below can be eliminated without jeopardizing the program. (Many of the steps will be discussed in more detail elsewhere in this manual.)

Implementation

1. Establishment of the Need and Value--Draw up a statement of the need for a cooperative education program with supporting evidence.
2. Local and State Support--Organize a steering committee made up of school personnel (including counselors and the administration's representative) to plan the organizational procedures.
3. Steering Committee--Activities and responsibilities follow:
 - a. Define the purpose and plan of the proposed program.
 - b. Develop an outline of activities to start the program.
 - c. Follow administrative policies and procedures established by the school system.
 - d. Develop the student selection criteria.
 - e. Determine the need for teaching facilities and office space to be used by the coordinators.
 - f. Decide on the nature of the in-school instruction plan and schedule.
4. School Administration Approval--Obtain approval of training plans and operating details from the school administrator.
5. Approval of Board of Education--Secure the approval of the board of education to conduct the cooperative program.

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6. Feasibility Study--Conduct a feasibility study to determine employer interests, employment opportunities, and student interests.
7. Employment of Teacher-Coordinator--Report to the board of education on the local survey and secure their approval to employ a qualified teacher-coordinator.
8. Advisory Committee--Establish an advisory committee to review the policy statement and the operating details for the administration of the program. (See Guideline 8.)
9. Faculty Support--Explain the plans for cooperative education to the school faculty.
10. Public Relations--Develop a public relations program in the school and community.
11. Instructional Facilities and Equipment--Arrange for instructional facilities and equipment.
12. Student-Trainee Recruitment--Encourage interested students to apply for admission into the cooperative education program and select the students.
13. Counseling--Explain the details of the program operation to the students selected and prepare them for the job application, employment interview, and job placement.
14. Training Stations--Inform prospective employers about the program and select the training stations.
15. Training Agreement--Develop a standard training agreement to insure progress on the job and adequate learning experiences.
16. Safety Practices--Check at the training stations for possible safety hazards to the student-trainee.
17. Maintenance of Records--Maintain placement records for review by the advisory committee and school administrators.
18. Establishment of a Schedule for Supervision and Coordination--Establish a schedule of supervision with an adequate allowance of coordination time.
19. Evaluation of Students' Performance--Fill in student evaluation forms and discuss them with students and employers.
20. Related Instruction--Provide related instruction in keeping with training agreements.
21. Co-Curricular Activities--Prepare basic plan for organizing the student club program.
22. Evaluation of the Program--Provide for evaluation of the program by means of a follow-up of the students. (Also, see Guideline 13.)

GUIDELINE NO. 7

Local School Policies Relative to Cooperative Education

Guideline

Local schools should develop operational policies for their cooperative education programs.

Explanation

The establishment of realistic standards, in the local cooperative education programs, will simplify the job of the teacher-coordinator as he explains the details of the program to fellow teachers, guidance counselors, parents, and employers. These standards can contribute to a healthy program and help develop relationships with individuals and groups.

These operating guidelines should be reviewed every two or three years by the advisory committee. If the committee recommends changes, these should be discussed with the superintendent, principal, or others who may have administrative responsibility for policy making.

State manuals define minimum standards, but local standards may be established above state minimum standards to provide for unique situations peculiar to that community.

Implementation

1. Use the state operating manual as the guide for preparation of local school policies.
2. Have the local steering committee review the local school policies and standards for the cooperative program.
3. Refer to the following seventeen examples of Local Policies for Cooperative Education.

Examples of Local Policies for Cooperative Education

The policies and procedures listed below can serve as an example of what may be done for a local program of cooperative education. The policies are not specific proposals but, rather, are illustrative of what might be included.

1. Selection of Students
 - a. Students enrolled in the cooperative program must be at least 16 years of age.
 - b. The students enrolled must have the ability to enter and progress in the vocation or occupation for which instruction is given.

- c. The final selection of the students is primarily the responsibility of the teacher-coordinator. The coordinator and members of the guidance staff should work together in developing and selecting a testing program that will provide the needed information about each student.
- d. All students enrolled must attend the pre-employment orientation class before the job interview is arranged.
- e. A student's parents should be interviewed.

2. Student Wages

- a. When the student enrolls, he should be paid as a beginning worker during the employment cooperative work-study assignment.
- b. Except for the matter of legality and the prevention of exploitation, the school should not enter into the problem of wage standards.
- c. Students employed in firms involved in interstate commerce should be paid at the established hourly rate in accordance with federal minimum wage regulations. All employed students under 18 must have "work permits."

3. Student Safety

- a. Employed students should provide their own transportation to and from their place of employment.
- b. Training stations should be selected with due consideration for the regulations regarding the employment of minors and safety factors.
- c. Employed students must be covered by workmen's compensation and disability insurance.

4. Training Plans and Agreements

- a. To provide for maximum individual training and direct on-the-job experience, a plan outlining the kinds of experiences to be assigned on the job will be prepared by the teacher-coordinator and the on-the-job supervisor.
- b. A written training agreement outlining the specific responsibilities of the parties involved should be prepared by the school when the student is placed on his training station.

5. Class Size

- a. The number enrolled in each related class should be specified. Some authorities recommend a minimum of fifteen and a maximum of twenty-five students.

- b. The maximum number of students assigned to one teacher-coordinator for placement and follow-up should not exceed the number that he is able to visit at least once or twice each grade period.

6. Related Instruction

- a. A minimum of one regular class period per day will be provided for related classroom instruction.
- b. Approximately 50 percent of the total classroom instruction in a one-year program should relate to general employment information. The remainder of the time will be devoted to individual study related to the specific job assignment and the procedures and processes involved.

7. Facilities for Related Instruction

- a. The cooperative education classroom should be equipped with tables and chairs suitable for individualized instruction. Adequate storage for reference books, pamphlets, and magazines, and other necessary materials should also be provided.
- b. Study guides related to the particular vocation should be available for individualized study.

8. On-the-Job Instruction

- a. The total time spent in school plus the time on the job should not exceed 40 hours per week.
- b. School time plus hours in employment should not exceed 8 hours per day.
- c. To receive credit for on-the-job training, the student should have a satisfactory job evaluation in terms of total hours of on-the-job instruction, experience, and other performance factors.
- d. The length of the on-the-job instruction should be specified. Some authorities suggest a minimum of three months.

9. Placement in Training Stations

- a. The teacher-coordinator should develop a systematic method of selecting training stations for student-trainees.
- b. When the student-trainee shows a sufficient degree of maturity and responsibility, he is placed in a training station as a part-time employee. Placement in the training stations should be completed before the close of the first grading period.
- c. Employers should interview and select the student-trainees to be employed.

10. Supervision and Instruction by Employer

- a. The teacher-coordinator should make regular visits to the student at his training station and discuss with the employer or the training supervisor the progress of each student-trainee.
- b. Employers should designate one person to whom the student-trainee is responsible while on the job.
- c. The training plan will serve as a guide for the in-school and on-the-job instruction plan.
- d. The employer's primary responsibilities are to provide a variety of skill-developing experiences related to the occupation.

11. School Credit for On-the-Job Experience and Related Instruction--The student's grade reflects an evaluation of his achievement and performance both in school and on the job.

12. Time and Travel Allowances for the Teacher-Coordinator

- a. Approximately half of each school day should be devoted to the supervision, coordination, and evaluation of the employment-part of the program.
- b. Travel should be reimbursed for the teacher-coordinator at the regular rate provided by the board of education.
- c. Each month the teacher-coordinator should file a time and effort report with the high school principal.
- d. An itinerary of proposed coordination visits should be left in the school office.

13. Administrative Relationships

- a. On-the-job instructors and supervisors should work closely with the teacher-coordinator.
- b. The teacher-coordinator should be responsible to the local director or high school principal.

14. Advisory Committee

- a. An active advisory committee should serve in an advisory capacity for the cooperative education program.
- b. This committee should have approximately equal representation from both employer and employee groups.
- c. If there is a general advisory committee, the craft or cooperative program committee should coordinate its activities with this general committee.

15. Community Activities and Promotion--A continuous program of public relations should be promoted by the teacher-coordinator.
16. Follow-Up of the Student-Trainee--The teacher-coordinator should maintain a follow-up file of graduates of the cooperative program. A report on graduates should be made to the advisory committee, administrators, and supervisors.
17. Program Evaluation--The cooperative education program should be evaluated each year. This evaluation should be based on the following:
 - a. The number of students who have achieved their career goal through the cooperative education program.
 - b. A favorable reaction of employers regarding the adjustment and performance of the cooperative students in the employment situation.
 - c. A general reaction survey based upon the attitudes of parents, teacher, guidance personnel, administration, etc.

GUIDELINE NO. 8

Advisory Committees

Guideline

Advisory committees for cooperative education should give assistance to teacher-coordinators and teacher-educators.

Explanation

Three topics will be explained, which include (1) justification of the advisory committee, (2) two types of committees, and (3) the functions.

- (1) The Vocational Education Act of 1963 makes the use of advisory committees mandatory for vocational programs at the state and national levels. If the instructional program is to be kept in tune with the needs of the individuals and the agencies to be served, they are also needed at the local level. The term consulting committee is sometimes used instead of advisory committee.
- (2) In large communities at least two types of advisory committees are usually organized to help the vocational-technical program. One committee is concerned with the total program, and the other deals with one cooperative education program, a trade field, or a family of occupations. The first type is often referred to as the "general" advisory committee, and the second type is

designated according to the vocation or service it is organized to advise. Sometimes this committee is called a "craft" committee; for example, the "cooperative office education advisory committee." In a small community, one committee may serve a cooperative program which has placements in off-farm agricultural businesses, service agencies, distributive establishments, business offices, and the industrial trades.

- (3) An effective advisory committee should add strength to the cooperative education program by serving as a sounding board for new ideas.

Implementation

1. Composition of Advisory Committee--All major trade or occupational groups of employers and employees should be represented. Each group should suggest names from which the teacher-coordinator can make a selection.
2. Letter of Invitation--The letter of invitation, asking a prospective committee member to serve, should come from the superintendent of schools. This letter should make clear to the prospective member the function of the advisory committee.
3. Employer and Employee Representation--It is well to have the same number of employer and employee representatives on the committee. A community representative may also be included.
4. Size of Committee--A committee of eight to twelve members is usually adequate.
5. Philosophy and Objectives of the Program--The school representative should be prepared to instruct the committee members regarding the philosophy and objectives and implementation of the vocational program.
6. Involvement of Superintendent--The superintendent or his representative should explain the consulting aspects at the first meeting of the advisory committee.
7. Representation by the School--A school representative usually serves in an ex officio capacity. Sometimes, the school coordinator will serve in this capacity as the secretary to the committee.
8. Term of Office--A plan should be developed for the rotation and replacement of committee members. Usually, a member will serve two or three years.
9. Agenda--A tentative agenda should be prepared and sent to the members several days before the meeting.
10. Minutes of the Meetings--At the conclusion of the meeting, the secretary should prepare the minutes of the meeting and mail them to each member of the committee.

11. Frequency of Meetings--Frequency of meetings should be established in the light of the work to be done. Once or twice each year should be often enough to meet after the program is well established.
12. Advance Planning--The teacher coordinator should involve the advisory committee in advance planning.
13. Committee Functions and Certain Observations and Suggestions--Additional assistance in establishing and operating the advisory committee follow:

Committee Functions

Advisory committees can assist local school personnel by:

1. Reviewing the goals and objectives of the local vocational program.
2. Explaining the cooperative programs to their friends and fellow workers.
3. Reviewing the course content or courses to be taught to see whether they are vocationally sound and are in keeping with the occupational needs of the community.
4. Reviewing ways and means of relating in-school to on-the-job instruction.
5. Recommending instructional facilities and methods for the selection of a teacher-coordinator to the school administration.
6. Interpreting regulations relating to the employment of minors.
7. Discussing local employment opportunities and standards.
8. Reviewing the guidance, counseling, and selection procedures.
9. Making recommendations regarding the placement and training of cooperative students on the job.
10. Assisting in finding training stations for cooperative students.
11. Working with the school in developing evaluation procedures for the local vocational program.
12. Assisting in organizing a follow-up program of cooperative graduates.

Observations and Suggestions

1. Strong cooperative programs have active advisory committees.
2. Advisory committees reflect the thinking of community in regard to educational activities.
3. School administrators and coordinators should evaluate the committee's advice, use it where it can upgrade existing programs, and initiate new ones.
4. Many criticisms leveled at cooperative programs can be avoided if active advisory committees are used effectively.
5. The planning of a committee meeting can be as valuable as the benefits derived from the meeting.
6. Committee members should be informed about activities of the local program.
7. The philosophy and objectives of the local program should be clearly defined by the coordinator and his superiors for the advisory committee.
8. Teachers and students usually react favorably when they learn that a representative group of community leaders are assisting in the local vocational program.
9. When selecting committee members, consider interest in school program, background of experience in relation to the committee's work, and community stature and leadership in the occupation or trade involved.
10. The benefits far outweigh the effort required to organize and involve the advisory committee.
11. Establish a suitable time, date, and place for future meetings.

GUIDELINE NO. 9

Public Relations Activities

Guideline

Effective public relations should be carefully planned to inform the public of the advantages, principles, and goals of the cooperative program.

Explanation

The cooperative program needs support from the school teaching staff, employers of the students, parents, workers in participating firms, and members of the community. This support can be obtained through an active information program designed to inform these groups about the cooperative program.

Good public relations revolve around the teacher-coordinator. He should develop good relations through his contacts with other teachers, students, employers, and community leaders. He should also utilize graduates of his cooperative program to inform the public about the usefulness of the program.

Implementation

1. Effective use of Media

- a. All communication media should be utilized in the cooperative program.
- b. News is not planned. Reporters, newscasters, feature writers, and other public information officials are antagonized by deliberate attempts to "advertise" in their media. If news occurs, call the education writer or editor in the respective media. At the same time, prepare a news release to give to him when he arrives. Let the newsman decide whether or not to include pictures. Invite him to look through your files to select pictures which might relate to the cooperative program.
- c. Involve only those parties who make the news in the news story. Do not attempt to "tell" the newsman what to write.

2. Feature Stories--During the year, the teacher-coordinator should write or have written feature stories about the cooperative program. These should be submitted as "exclusives" to selected media, such as radio, television, newspaper, business periodicals, and trade publications.

3. Reports to Faculty and Administration--Inform the faculty and administration about all news in the cooperative program. This can be done through a weekly newsletter and an end-of-the-year annual report about the program.

4. Public Relations for Parents--Parents can be the biggest boosters of the cooperative program. Prepare a printed newsletter every two weeks and mail to the parents of the student-trainees. The newsletter should include general news about the program and personal notes of interest.

5. Business Awards--Initiate "outstanding student" or "student of the year" awards through the organizations in the community which contribute to the cooperative program.
6. Alumni Group--Organize graduates from the cooperative program into an alumni group. The teacher-coordinators should attend their meetings and serve as advisors to these groups.
7. Additional Information Material--Additional material telling about the cooperative program should be prepared and presented to interested groups or individuals. This material could be in the form of printed brochures, films, slides, or radio tapes.

GUIDELINE NO. 10

Teaching Facilities

Guideline

Teaching facilities should be planned for maximum and effective use.

Explanation

Instructional facilities may consist of classrooms and fully equipped shops or laboratories where pre-employment skills are taught, including study tables, chairs, desks, files, bookcase, chalkboards, bulletin boards, and magazine racks. A coordinator's office and a combination conference room and library should also be provided adjoining the classroom.

Implementation

1. Classroom--Instructional facilities should be flexible enough to provide both group and individualized instruction. Consideration should be given to the facilities required by the largest class. The classroom should present a realistic atmosphere and allow sufficient room for the students and teacher to work efficiently.
2. Storage Space--Provision should be made for the storage of instructional aids and equipment such as charts, slide projector, overhead projector, student's notebooks, instruction sheets, reference pamphlets, and supplemental books.
3. Distributive Education--If the room is to be used for distributive education classes, the equipment should include display cases, sales counter, cash register, storage facilities, and other equipment needed for an effective instructional program.
4. Office Practice--If the room is to be used as an office practice laboratory, the equipment should include typewriters, adding

machines, bookkeeping facilities, file cabinets, transcribing units, and other equipment needed to provide skill-developing activities for those who may need practice to gain proficiency.

5. Industrial Vocations--If pre-employment instruction is given in the industrial vocations, the shops should be equipped with tools and machines that would normally be found in the places of employment.
6. Off-Farm Occupations--If pre-employment instruction is to be provided in off-farm occupations, facilities should be available to teach the background skills needed for represented areas of employment.
7. Coordinator's Office--An office should be provided for the coordinator where he can conduct interviews, keep student records, and work while the classroom is in use by another group.
8. Combination Conference Room-Library--A combination conference room-library should be adjacent to the instructor's office and classroom, so that the instructor can easily get to both the conference room-library and the classroom.

GUIDELINE NO. 11

In-School Instruction

Guideline

In-school instruction should make on-the-job experience educationally valuable.

Explanation

In every cooperative education program there is evidence of at least two major plans. One plan consists of related instruction and the other plan defines the learner's duties at the training station. This guideline is concerned with the nature of the related instruction.

In-school instruction should be classified in two major phases. The first phase consists of units that relate to all types of employment with information and technical knowledge needed for the development of vocational competence.

The second phase consists of units relating to the student's job. These units can be studied on an individual or small group basis.

Implementation

1. Training Plan--The training plan, prepared by the teacher-coordinator and the student's on-the-job supervisor, should identify the job

activities to be studied, the knowledge and skills needed for successful performance of those activities, and which elements of the training will be given in school and which will be given on the job. The educational aspects of the plan should be emphasized rather than production requirements. The next guideline specifically deals with on-the-job instruction.

2. Relationship Between Instruction In School and On The Job--Each student should understand that the in-school and on-the-job instruction represent two aspects of the same process, and both should contribute to the achievement of his career objectives and to transition, upon graduation, from school to full-time employment.
3. In-School Instruction--In-school instruction should be based on an analysis of the requirements of the on-the-job experiences.
4. Content of In-School Instruction--The content of in-school instruction typically includes:
 - a. Orientation units such as how to apply for a job, employee responsibilities, development of good work habits, the importance of proper grooming, laws and regulations affecting the worker, social security, income tax, and the elements of proper communication. This instruction should be given before the first employment interview.
 - b. Units on work habits and attitudes. The student-trainee should learn elements of job responsibility from his instructor. The student-trainee should understand that the on-the-job training station is a learning laboratory to practice desirable work habits and attitudes that contribute to his own personal development.
5. Community Resources--The teacher-coordinator should bring resource personnel into the classroom to handle certain units.

GUIDELINE NO. 12

On-The-Job Instruction

Guideline

On-the-job training in the cooperative program should contribute directly to the development of occupational competency.

Explanation

Occupational competency is developed by the student-trainee at the training station. It takes the collective effort of both the on-the-job supervisor and the teacher-coordinator to implement the details of the on-the-job training plan. The on-the-job supervisor instructs the student-trainee at the training station.

Implementation

1. Duties of the On-The-Job Supervisor

- a. The on-the-job supervisor, designated by the employer, should orient the student to his training station.
- b. The on-the-job supervisor should help the teacher-coordinator determine the necessary pre-employment skills and knowledges for placement of the student-trainee.
- c. The on-the-job supervisor should telephone the teacher-coordinator about problems that arise.
- d. The on-the-job supervisor should encourage the student-trainee to ask questions to clarify instructions and avoid mistakes.
- e. The on-the-job supervisor should teach safety practices along with the specific skills involved in doing a particular job.
- f. The on-the-job supervisor should prepare periodic evaluations of the student-trainee's progress.

2. Responsibilities of the Teacher-Coordinator

- a. The teacher-coordinator should help the employer understand the educational philosophy, the plan, and the purpose of co-operative education.
- b. When the teacher-coordinator visits the on-the-job supervisors, he should report first to the main business office.
- c. The teacher-coordinator should visit each student-trainee on the job at least once each grading period. Visits should be made more often if job adjustment problems exist or if additional attention and help is necessary.
- d. The teacher-coordinator, when visiting the student's employer, should be concerned about the following: (1) satisfaction of the employer with the work of the student-trainee, (2) the student's attitude toward his job, his employer, and his fellow workers, (3) the student-trainee's satisfaction regarding his own progress and learning experiences, and (4) the nature of the related instruction that should be assigned.
- e. The teacher-coordinator should inform the on-the-job supervisor about the student-trainee's progress in school.

3. Student Reports--Some teacher-coordinators require student trainees to prepare a daily work record listing the operations, jobs, and processes performed at work. This record provides a report of each day's activities and a continuous summary of on-the-job experience.

GUIDELINE NO. 13

Evaluation of Training

Guideline

The evaluation of the cooperative education program should be a continuous process covering all aspects of the program.

Explanation

The following questions will serve as the basis for evaluating the effectiveness of the various aspects of the program. The answers to the questions listed, therefore, should reflect the quality of the program. The growth and development of the students enrolled as they study and work toward realistic vocational goals should be the primary concern in every phase of evaluation. A suggested evaluation guide follows:

The School

	<u>yes</u>	<u>no</u>
1. Does the cooperative education program provide for the full range of abilities of the student-trainees?	_____	_____
2. Are the school administrators interested and involved in defining policies relating to the cooperative education program?	_____	_____
3. Are the enrollment standards for the cooperative program realistic in relation to the vocational demands?	_____	_____
4. Do the student personnel records contain information about the background, interest, potential, and achievement of the students enrolled?	_____	_____
5. Is the cooperative education program geared to the needs of the community it serves?	_____	_____
6. Does the school have a plan for student placement and follow-up?	_____	_____

The Teacher-Coordinator

1. Does he have the necessary background of professional training and employment experience?	_____	_____
2. Does the teacher-coordinator prepare student-trainees to be productive citizens?	_____	_____

- | | <u>yes</u> | <u>no</u> |
|---|------------|-----------|
| 3. Does he enjoy working with school personnel, employers, and other community groups? | _____ | _____ |
| 4. Is he articulate in explaining the educational and job adjustment values of the cooperative education program? | _____ | _____ |
| 5. Does he maintain adequate student personnel records to show their progress both in school and on the job? | _____ | _____ |

The Program

Organizing New Programs

- | | | |
|--|-------|-------|
| 1. Is there a plan for starting and operating a new program? | _____ | _____ |
| 2. Has the local school administrator utilized the resources of the State Department of Education in establishing the cooperative program? | _____ | _____ |
| 3. Does the teacher-coordinator cooperate with the school administration in presenting the program to the community? | _____ | _____ |
| 4. Are there specific objectives for the cooperative education program? | _____ | _____ |
| 5. Do the local school administrators have school policies for the organization and operation of the cooperative program? | _____ | _____ |

Advisory Committee

- | | | |
|---|-------|-------|
| 1. Does the representative advisory committee meet regularly with school personnel to assist them in the development of the program in the community? | _____ | _____ |
| 2. Does the teacher-coordinator assist the advisory committee chairman in preparing the meeting agenda? | _____ | _____ |
| 3. Does the teacher-coordinator keep the advisory committee informed of activities and developments affecting the local program? | _____ | _____ |

Public Relations

- | | | |
|--|-------|-------|
| 1. Is a public relations program in operation? | _____ | _____ |
| 2. Does the teacher-coordinator disseminate helpful information about the cooperative program? | _____ | _____ |

- | | <u>yes</u> | <u>no</u> |
|--|------------|-----------|
| 3. Are trade associations and employer and employee groups encouraged to recognize outstanding student performance by presenting suitable awards and prizes? | _____ | _____ |
| 4. Do the school administrators and student-trainees sponsor an appreciation banquet for the cooperative employers? | _____ | _____ |

Teaching Facilities

- | | | |
|---|-------|-------|
| 1. Are the teaching facilities flexible enough to permit the use of the best instructional methods? | _____ | _____ |
| 2. Is there sufficient storage space for supplies? | _____ | _____ |
| 3. Are there adequate facilities for student-teacher conferences? | _____ | _____ |

Instruction

- | | | |
|---|-------|-------|
| 1. Is there a syllabus for the in-school instruction? | _____ | _____ |
| 2. Does the teacher-coordinator use the on-the-job experiences of students when teaching the related class? | _____ | _____ |
| 3. Is there a pre-employment orientation to prepare the student-trainee for an interview? | _____ | _____ |
| 4. Are various teaching methods used in the related class to provide for both individual and group instruction? | _____ | _____ |
| 5. Does the employer understand the plan, purpose, and educational philosophy of the cooperative education program? | _____ | _____ |
| 6. Does the school give graduation credit to the student-trainees for successful on-the-job experience? | _____ | _____ |
| 7. Does the employer evaluate regularly the student-trainee's performance and progress? | _____ | _____ |

Evaluation

- | | | |
|--|-------|-------|
| 1. Is opportunity given to members of the school faculty to discuss the cooperative education program as a means of educational development? | _____ | _____ |
| 2. Does the school have a follow-up program? | _____ | _____ |

- | | <u>yes</u> | <u>no</u> |
|--|------------|-----------|
| 3. Are the opinions of parents sought in evaluating the program? | _____ | _____ |
| 4. Are the opinions of employers sought in evaluating the program? | _____ | _____ |
| 5. Are the opinions of graduates sought in evaluating the program? | _____ | _____ |

The Student-Trainee

Recruitment and Selection

- | | | |
|--|-------|-------|
| 1. Is there a plan for publicizing the cooperative education program? | _____ | _____ |
| 2. Are the students capable of achieving success in the occupations selected? | _____ | _____ |
| 3. Does the advisory committee take an active part in the recruitment and selection of students? | _____ | _____ |
| 4. Does the guidance office supply test information for counseling applicants? | _____ | _____ |

Placement and Supervision

- | | | |
|--|-------|-------|
| 1. Are the student-trainees placed on jobs which will provide them with the kinds of experience needed for a career objective? | _____ | _____ |
| 2. Does the teacher-coordinator regularly visit the student-trainees on the job? | _____ | _____ |
| 3. Are the elements of job safety checked by the teacher-coordinator and the employer? | _____ | _____ |

Legal Responsibilities

- | | | |
|---|-------|-------|
| 1. Is the teacher-coordinator informed of the changes in regulations of the employment of minors? | _____ | _____ |
| 2. Are the cooperating employers familiar with the insurance needed to protect the student-trainee? | _____ | _____ |
| 3. Is there a good working relationship between the school and the law enforcement agencies about the employment of minors? | _____ | _____ |

Activity Program

- | | <u>yes</u> | <u>no</u> |
|---|------------|-----------|
| 1. Does the school have a youth group program for cooperative education student-trainees to develop informal learning and leadership? | _____ | _____ |
| 2. Do the students conduct an annual appreciation activity for the employer? | _____ | _____ |

The Employer

- | | | |
|--|-------|-------|
| 1. Does the cooperating employer understand his role in the education of the student-trainee? | _____ | _____ |
| 2. Does the employer provide a variety of learning experience for each student-trainee? | _____ | _____ |
| 3. Does the teacher-coordinator show equal concern for both the employer and student-trainee when placement is made? | _____ | _____ |
| 4. Does the on-the-job supervisor decide with the teacher-coordinator what should be taught in the related class? | _____ | _____ |
| 5. Is there a training plan in use for each student-trainee? | _____ | _____ |

GUIDELINES ABOUT THE STUDENT-TRAINEE

14. Recruitment and Selection of the Student-Trainee
15. Placement, Supervision, and Follow-Up
16. Legal Responsibilities
17. Activity Programs for the Student-Trainee

GUIDELINE NO. 14

Recruitment and Selection of the Student-Trainee

Guideline

Students who need, want, and can profit from the experiences provided should be selected for the cooperative education program.

Explanation

All available resources of the school, including guidance services, school records, and faculty recommendations should be utilized in selecting students for the cooperative program.

The teacher-coordinator has the challenge to develop a procedure to recruit and select students who will benefit most from the combination of in-school instruction and on-the-job training.

Implementation

The following steps should be employed to recruit and select prospective students:

1. Obtain Administrative Approval--The teacher-coordinator should seek administrative approval for his recruitment plan. This plan should include:
 - a. Statement from the superintendent's office approving recruitment procedures.
 - b. Recommendation from the advisory committee relating to public relations, recruitment procedures, and student selection.
2. Distribute Recruitment Bulletin--A recruitment bulletin describing the cooperative education program should be given to prospective students. This bulletin should include: (a) a general description of the cooperative education program including the time in school, related instruction, and minimum and maximum hours on the job; (b) conditions of enrollment including age, grade completed, scholastic average, and career objective; (c) occupational information relating to the student's career objective; and (d) enrollment dates and the specific procedures to follow.
3. Determine Student Interest--If an assembly program is presented or the teacher-coordinator speaks to a particular class, students should be given an opportunity to fill in an "interest form" for use by the teacher-coordinator in scheduling enrollment interviews.
4. Recruit Students--In recruitment talks, the teacher-coordinator should point out the in-school instruction and on-the-job training features of the cooperative education program. He should also stress the importance of personal development which comes through employment.

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5. Select Students--To be selected the student-trainee should have the intelligence, interest, aptitude, maturity, and personality to succeed in the program. The paid part-time employment aspect of the cooperative plan makes it possible for the school to select students from low-income families. The teacher-coordinator should consider the following qualifications when selecting students:

a. Interest	i. Age
b. Mental capability	j. Hobbies
c. Physical suitability	k. Past work experiences
d. Moral responsibility	l. Personality characteristics
e. Social adaptability	m. Sex (when a requirement)
f. Educational background	n. Former employers' opinions
g. Disciplinary record	o. Other school activities
h. School attendance record	
6. Gather Information About Students--The teacher-coordinator should ask faculty members to give information about prospective students and to help evaluate the school records of students according to enrollment standards. When test information is not available, the guidance counselor should administer the necessary tests to determine aptitude, interest, achievement, and personality.

GUIDELINE NO. 15

Placement, Supervision, and Follow-Up

Guideline

The placement, supervision, and follow-up of students should conform to the best interests of the student, the school, and the cooperating employer.

Explanation

The transition from school to work is a major adjustment for most young people. The teacher-coordinator and employer should work together to develop a plan to help the student-trainee adjust to his job. For example, before the student is sent for the job interview he should be instructed about the job application, the interview procedure, and his responsibility.

When the student understands the nature of his responsibilities in the work-study situation, he should realize the importance and the

relationship of his school work to job success. He should also understand the importance of supervision by his teacher-coordinator and his employer. Each assumes a vital role in the development of skills and understanding.

In the follow-up phase of cooperative education, the teacher-coordinator should be concerned about the progress of the student-trainee on each job and what happens to him after graduation from high school. A good follow-up plan is very important in judging the effectiveness of the entire program.

Implementation

1. Interview Orientation--Proper orientation to employment interviews should be given before students are sent to be interviewed by prospective employers. Orientation instruction should include:
 - a. Appropriate grooming
 - b. Courtesies to be followed when presenting a letter of introduction
 - c. Proper attitudes regarding employment and vocational goal
 - d. Questions to ask regarding the work to be assigned
2. Application Forms--Before the employment interview, students should be given instruction and practice in preparing job application forms.
3. Student Data--The employer should have all the information that he desires regarding the students sent for interviews. Information about their career goals, school attendance, scholastic records, and pre-employment courses completed will be helpful to the employer as he selects the student-trainee.
4. Student Interview--When possible more than one student should be sent to the employer for a job interview. Sending two or three for each job opening will provide important experience for each student and it will give the employer a chance to select the student who will best fit his situation.
5. Student Placement
 - a. The teacher-coordinator should send only those students to an employer who have the aptitude, interest, and intelligence to perform the work assigned.
 - b. If a student has been employed during the summer and wishes to remain with the same employer as a student-trainee, he should be permitted to do so if both he and his employer clearly understand the relationship of the in-school and on-the-job experience to his educational and vocational development.

- c. The teacher-coordinator and the cooperating employer are responsible for the welfare and safety of each student-trainee. Therefore, the work assigned should be in keeping with the regulations relating to the employment of minors.
- 6. Training Plan--The teacher-coordinator and the employer should develop a plan for each student-trainee that outlines the kinds of instruction and supervision to be offered in the cooperative work-study period.
- 7. Teacher-Coordinator Visits--The teacher-coordinator is expected to visit each employer at least once each grade period to discuss the adjustment, performance, and progress of each student-trainee. Such visits should be more frequent if problems arise.
- 8. Student Evaluation
 - a. The student-trainee should know the factors the employer or the supervisor consider when preparing the student-trainee evaluation form.
 - b. An evaluation form should be prepared each grade period. This evaluation is an objective means of recording the student's performance and progress.
- 9. Follow-Up--The follow-up of student-trainee should include the visits made while in school and also the record of employment and adjustment to full-time employment after graduation. Follow-up information can be used to determine the success of the program.

GUIDELINE NO. 16

Legal Responsibilities

Guideline

The legal aspects of the employment of cooperative students should be known and adhered to by the teacher-coordinator and the employer.

Explanation

Cooperative education programs must be operated within federal, state, and local laws and regulations. These laws relating to the employment of minors are similar in every community. The teacher-coordinator should keep informed about the regulations applicable to his school service area, such as employment certification, hazardous occupations, wage and hour laws, jobs requiring licenses, and social security regulations.

The teacher-coordinator should discuss with the cooperating employer, the student, and the parents all regulations applicable to the job. Any questions about regulations should be discussed with a representative from the proper governmental agency.

Implementation

1. Work Permits and other Working Papers--The teacher-coordinator should work closely with the agency concerned with enforcing the child labor laws.
 - a. Instructions about the "work permits," employment certificates, or working papers should be given to each student.
 - b. The school records should show when "work permits" have been issued to students. Such permits must be issued before they are placed on a cooperative job.
 - c. The employer should be reminded that a student under 18 cannot be legally employed without a "work permit."
2. Child-Labor Laws--The teacher-coordinator should study the child-labor laws in his state.
3. Fair Labor Standards Act
 - a. State staff members, concerned with cooperative education programs, should inform the state administrators of the Fair Labor Standards Act and other similar regulations about the purposes and plan of operation of cooperative education.
 - b. The teacher-coordinator should be informed about the provisions and amendments of the Fair Labor Standards Act of 1938 regarding interstate commerce.
 - (1) He should discuss with the employer provisions relating to minimum wage and overtime pay.
 - (2) The employer should know how exemptions may be made by issuing special certificates for learners and apprentices.
4. Disability Insurance--The teacher-coordinator should discuss with students the terms of disability insurance carried by business and industry.
5. Workmen's Compensation Insurance--The teacher-coordinator should exercise caution in placing students with employers who may not carry workmen's compensation insurance or other comparable coverage for injuries incurred while on the job.
6. Social Security--Instruction regarding the basic provisions of the Social Security Act should be given in the related class.

7. Working Hours--The teacher-coordinator should establish employment guidelines relating to hours of work for both boys and girls. These should be checked against the state and federal regulations.
8. School Attendance--School attendance laws should be strictly enforced for all students enrolled in the cooperative education program.

GUIDELINE NO. 17

Activity Programs for the Student-Trainee

Guideline

A program of co-curricular activities for the student-trainees should be a part of cooperative education.

Explanation

Youth-group activities are a vital part of the total learning experience. Young people need to have friends and be identified with a group having common interests. They need to be given a chance to participate in a group where student leadership can be exercised and developed.

State and local staff members responsible for cooperative education should provide an organized plan of co-curricular activities. The plan should define conditions of membership in terms of vocational interests and goals, patterns of organization, and activities to serve as a setting for leadership development.

Local teacher-coordinators of cooperative education programs should also be involved in planning appropriate youth-development activities.

Implementation

1. Membership Qualification--To be a member of the youth-group activity, a student should be enrolled in a state-approved vocational education program.
2. Group Sponsor--An advisor directly involved in the school's program of cooperative education should supervise youth groups.
3. Vocational Activities
 - a. Each youth group should develop a program for exploring the employment and career opportunities related to interests or concerns of the majority which involves cooperative action of the entire group.

- b. Youth-group activities should involve participation of community leaders who can explain the nature and function of business and trade associations which sponsor education activities such as institutes and conferences.
- 4. Personal Growth--All members of youth groups should be encouraged to participate in service activities which contribute to school improvement, individual growth, and leadership development.
- 5. Employer Appreciation--Youth groups should plan and sponsor employer appreciation activities to acquaint community and educational leaders with the cooperative programs.

GUIDELINES ABOUT THE EMPLOYER

18. Selection of Training Stations
19. Preparation and Use of Training Plans

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GUIDELINE NO. 18

Selection of Training Stations

Guideline

Training stations should be selected for their educational value to the cooperative education student.

Explanation

The nature and extent of learning experiences provided by the employer are factors that help to determine the effectiveness of the cooperative program. The teacher-coordinator should visit potential employers and discuss with them the values of the cooperative program. He should stress placement in a job, learning while on the job, skills to be learned, safety practices, general working environment, supervisor's duties, and evaluation procedures.

Implementation

The following items should be used as criteria in selecting training stations:

1. Type of occupations--The training station should provide experience in occupations that require both skills and knowledge.
2. Opportunities for rotation--The training station should provide a wide variety of direct experiences associated with the occupation. It should not be merely routine work experience of a repetitive nature.
3. On-the-job supervision--The training station should be supervised by someone competent in the skills and technical aspects of the occupation. He should be interested and eager to assist in the training program.
4. Working conditions--The working conditions of training stations should be safe with a good record of accident prevention. Training stations should be free of hazards that might impair the safety or health of the workers.
5. Reputation--Business establishments who furnish training stations should have a good reputation through ethical business practices.
6. Hours of employment--There should be a sufficient number of working hours at the training station.
7. Facilities and equipment--Up-to-date facilities and equipment should be used at the training station.
8. Supervisor and student-trainee--Good supervisor and student-trainee relationships should exist at the training station.

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9. Accessibility--Consideration should be given to the travel time between the school and the training station.
10. Wages--Consideration should be given to a minimum wage for student-trainees based on that paid other employees of similar experience and training.

GUIDELINE NO. 19

Preparation and Use of Training Plans

Guideline

A training plan should be prepared and signed by the student-trainee and used as a guide for instruction by the teacher-coordinator and employer.

Explanation

The occupational training plan is an individualized course outline developed for the student-trainee. Its aim is to list the learning experiences which will assist him toward his career goal.

The best training plan provides a systematic method of keeping progress records of work completed, skills learned, and operations performed. A copy of the training plan should be included in the student's personnel record.

In some schools, a general statement which defines the responsibilities of the student-learner, the employer, the supervisor, and the teacher-coordinator is prepared and signed by the student, parents or guardian, employer, and coordinator.

Implementation

1. Training Plan--The training plan lists the skills and related knowledge to be mastered by the student-trainee.
2. Employer--The training plan should provide the employer with a guide to assist the student-trainee in securing on-the-job experience and developing skills and knowledge.
3. Supervisor--The training plan should emphasize the supervisor's role as a teacher in the cooperative program.
4. Teacher-Coordinator--The teacher-coordinator should review the training plan with the employer and the student-trainee.
 - a. Previously-developed training plans should serve as a guide to the coordinator in selecting training stations.

- b. A training plan should eliminate the possibility of placing a student in a job where the learning opportunities are limited.
5. Student--The training plan should contain a record of progress, knowledge, and skills mastered. It should define the student-trainee's responsibility for personal conduct and performance in keeping with his career objective.

PART III PAPERS PRESENTED AT THE NATIONAL SEMINAR

A National Seminar on Cooperative Education, sponsored by The Center for Vocational and Technical Education, was held on August 1-5, 1966. Seventeen special papers presented at the Seminar are reproduced in Part III. The affiliation of each of the authors is presented in the Table of Contents and a biographical sketch appears as Appendix A in this publication.

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IMPENDING SOCIAL, ECONOMIC, AND EMPLOYMENT CHANGES THAT MAY AFFECT
COOPERATIVE EDUCATION

Joseph W. Hines

I am glad to be here today to share with you some thoughts about social and economic trends which impinge upon the kinds of education and training that workers need in today's job market. I am especially happy on this occasion because the most arduous part of the job was done for me. Morton Levine, who was originally to have made this talk, prepared a set of remarks for this occasion before the prolongation of the airline strike made it necessary for him to arrange for a substitute.

In thinking about the focus of our topic this morning, I was impressed by the wide-range of activities encompassed by cooperative education. Business education, technical education, and other cooperative education programs in high schools provide an introduction to meaningful work experience for many youngsters. Moreover, they often enable young people to stay in high school who might otherwise drop out. In the growing number of community colleges and technical institutes, great stress is often placed on cooperative education programs. The dynamic leadership that is arising in the two-year college field is bringing imaginative innovations to cooperative education and other post-high school educational programs. During the sixty years that have elapsed since cooperative education, as a form of higher education, was founded at the University of Cincinnati by Professor Herman Schneider, many college students have had a unique opportunity to relate what they have learned in the classroom to the work place. The opportunity provided for young people to help defray the cost of attending college is important as well. Cooperative education programs of many types are now offered in more than seventy colleges and universities. Cooperative education is, indeed, a big picture on a wide screen.

Perhaps one of the most significant social and economic trends of our time is a widening interest in work experience programs. The "war on poverty" and the "active manpower policy" of the Labor Department have both drawn on the experience of cooperative education in developing new approaches to social and employment problems. The work-training programs have been among the most successful approaches used by these endeavors.

The Neighborhood Youth Corps places special emphasis on encouraging young people to stay in school or resume their schooling. Enrollees attending school are limited to fifteen hours of work a week to assure that work time does not interfere with school work. At the post-high school level, the work-study programs have financed part-time jobs, provided by the educational institutions, for students who need financial assistance to continue their studies.

The breadth of cooperative education is reflected in the multiple roles that cooperative educators are called upon to play. Those I know wear many hats--teacher, counselor, and placement director come immediately to mind. In the school setting, the cooperative education staff

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are probably the group most directly involved in the transition from school to work. They bring the realities of the world of work into the classroom; they bring the job and the student together; and they assist the student in adjusting to the job setting. Hence, cooperative educators are interested in the kinds of jobs that are and will be available; they want to know where the jobs are (which industries are growing and which are declining), and they are concerned with social and economic problems that affect the careers of their students. These interests define then the focus for our discussion this morning. Since cooperative education is a big picture, we will paint with a broad brush--and try to skip most of the gory details.

First, let's take a quick look at the economic setting. This month the American economy is continuing in the longest sustained advance on record. The unprecedented upturn began in mid-1961. Since then, we have seen falling unemployment rates, new industrial production records, rising personal incomes, and record business profits. If we sum up in terms of that broadest of economic measures, Gross National Product--that is the dollar value of all goods and services produced in the nation--we find the economy is now running at a rate of more than \$700 billion a year, up \$200 billion since 1960.

Most economists anticipate that the general economic outlook will continue to be bright during the next decade. James Knowles, Executive Director of the staff of the Joint Economic Committee of Congress, projects a five percent annual increase in GNP right on through 1970 based on sustained strong consumer demand and private investment. This increase would mean a Gross National Product of \$850 billions by 1970. If these figures seem a little high, hear what the highly respected, and often quite conservative, researchers from the Twentieth Century Fund have to say about the prospects in 1975. They expect the economy by that time to reach a \$1 trillion Gross National Product--again on the basis of sustained consumer demand and high levels of public and private investment.

This anticipated economic growth will be accompanied by rapid population growth. The total population will increase by almost 28 million (nearly 3 million a year) during the 1960's and by an additional 17 million (well over 3 million a year) in the first half of the 1970's. The projected population figures for the United States are 209 million in 1970, up from 181 million in 1960. By 1975, the population will approach 226 million.

The age distribution of the population will change significantly. There will be many more older people and many more young children. Moreover, we are seeing now a dramatic increase in the number of young people who reach the age of 18 each year--the crucial turning point in the lives of the majority of young people. Here, they either go into the labor force, enter post-high school training for work, or proceed to college.

The country's labor force will expand at a faster rate than its population during the remainder of this decade. The number of young workers who will enter the labor force will be far greater than the

economy has ever before been required to absorb in a similar period. The number of older workers and of women workers will also increase substantially. Over-all, we will need for the next ten years about one and one-fourth to one and one-half million jobs a year to take care of new or newly returned entrants into the labor force. The Council of Economic Advisors estimates that to do this job the economy will have to grow at a rate of approximately 4 percent a year. Fortunately, you will recall that there are good possibilities the economy can grow at even a little better rate in the next 10 years.

Within this general economic setting, we expect that employment will rise by one-fourth by 1975. However, growth rates will vary by industry. For many years, there has been a shift in employment away from predominantly goods-producing industries to predominantly services-producing industries. As our production processes become more efficient and as income rises, we devote an increasing proportion of our labor resources to the provision of services such as health, education, and financial services. The affluent society is a service-oriented society. It was just a decade ago, in 1956, that employment in the provision of services first exceeded goods-production employment in this country.

Now, let's take a closer look at where the jobs will be in the decade ahead.

Agriculture is a major industry that is facing a continuing decline in manpower needs. Rapid mechanization, improved fertilizers and feeds, and a declining number of farms will continue to reduce the need for farm workers. My impression is that most colleges of agriculture have shifted their emphasis toward training students for careers in agriculture-related businesses. The outlook for production, sales and service jobs in such agriculture-connected businesses as food processing, agricultural chemicals, and agricultural machinery and equipment is much better than prospects on the farm. It might be worthwhile for more secondary schools to consider the collegiate model in agricultural education.

Mining is the only major non-agricultural industry for which no increase in manpower requirements is expected.

Contract construction is expected to grow at a more rapid rate than the average for all non-farm industries. The outlook is for construction employment to increase by more than one-third between 1964 and 1975. Graduates of pre-apprenticeship programs and building trades programs will also find additional opportunities because of replacement need. The average age of workers in a number of construction trades is rather high.

Manufacturing employment may grow by almost one-fifth in the decade ahead. Although the growth will vary for individual manufacturing industries, over-all the growth rate will be below average. However, since manufacturing is the largest industrial sector with the most employees, replacement needs, as workers retire or leave the industry for other reasons, will continue to generate a large volume of jobs.

Government will be a major source of new jobs in the coming decade. The employment level in government may be as much as one-half higher in 1975 than in 1964. The great bulk of the openings in government will be for people who work for state and local governments--teachers, policemen, firemen, and public health service personnel.

Service industries will be among the fastest growing industries during the next ten years. About 50 percent more workers will likely be employed in this industry division in 1975 than in 1964. As the young and old segments of our population increase, medical and health services will have to be expanded substantially. Business services (advertising, accounting, auditing, data processing, collection agencies, and maintenance firms) are also certain to grow. Manpower requirements in educational services are expected to grow especially fast as more young people attend school at all levels.

Employment in wholesale and retail trade may grow by nearly one-fourth between 1964 and 1965, not quite so fast as non-farm employment as a whole.

Cooperative educators may find some challenges in these industrial employment changes. Manufacturing has long accounted for a large share of total employment opportunities. As the factory growth rate slows and rapid growth continues in the services industries, cooperative education staff members will need to look increasingly to the non-manufacturing sector as a source of jobs. Manufacturing employment tends to be concentrated in large firms with well-organized personnel departments. Services employment is spread over a large number of smaller firms whose managements may be less likely to be knowledgeable concerning cooperative education.

Now that we have discussed where the jobs will be, let's take another perspective and consider the kinds of jobs there will be. Compared with the expected growth of about one-quarter in total employment between 1964 and 1975, an increase of nearly one-third is anticipated for white-collar jobs and nearly a fifth for blue-collar occupations. By 1975, white-collar jobs may make up nearly one-half of all employed workers.

The fastest growing occupations during the next decade will continue to be professional and technical occupations. Personnel in these areas will be in sharp demand as the nation explores new approaches to education; bends greater effort toward America's socio-economic progress, urban renewal, and transportation; harnesses the ocean; enhances the beauty of the land; and conquers outer space. Over-all, by 1975, the requirements for these workers may be more than 50 percent higher than in 1964. Although college enrollments are rising rapidly, it appears likely that the demand for college-trained people will continue to outrun the supply. This underlies the importance of cooperative education programs in engineering and other disciplines which help to defray the cost of a college education.

Service workers, a diverse group, may increase by as much as one-third by 1975. A relatively swift rise in demand for protective service

workers such as policemen and firemen is to be expected as the population increases in urban and suburban communities. A very substantial increase in the demand for attendants and other service workers in hospitals and other institutions is also anticipated. Other categories of service workers for which requirements are expected to increase rapidly include waiters and waitresses, cooks, counter and fountain workers, and charwomen and cleaners.

Clerical workers will be in strong demand, particularly those qualified to handle jobs created by the change to electronic data processing and those skilled in work involving public contacts. Employment opportunities will be particularly numerous for secretaries and stenographers, typists, and bookkeeping and accounting clerks. On the other hand, demand is expected to be slow for file clerks, calculator operators, and pen-and-pencil recordkeepers. The number of clerical workers is expected to increase by more than one-third between 1964 and 1975. But this increase represents only part of the opportunity for new clerical workers. An even greater number of clerical workers will be needed to replace those who retire or leave their jobs for other reasons. Employee turnover is especially high among clerical workers because many young women do this kind of work for only a few years and then leave their jobs to remain at home and care for their families. Cooperative office education and cooperative business education programs in high schools and junior colleges are important sources of qualified clerical workers. The many clerical job openings that will become available during the next decade will provide jobs for an increasing number of graduates.

The outlook for skilled workers is mixed. While the demand for skilled workers is spurred by the growing needs for mechanics and repairmen, building trades craftsman, and foremen, there are technological changes underway in manufacturing which tend to limit the expansion of the group. About average growth is expected between 1964 and 1975.

Managers, officials, and proprietors as a group also will increase at about the average rate for all occupations. The demand for salaried managers and other officials in business organizations and government is expected to continue to increase at a fairly rapid rate. Although the number of independent businessmen has declined substantially since World War II, this trend is expected to level off in the years ahead.

The number of sales workers will increase more slowly than other white-collar groups, although wholesale and retail trade activity is expected to rise considerably in the coming decade. Changes in distribution methods--such as self-service, automated vending, and allied techniques--are likely to have a restrictive influence on employment growth. Nevertheless, the over-all increase in needs for sales workers will be slightly above average for all workers, about a 30 percent increase between 1964 and 1975.

This about sums up the big picture as to where the jobs will be and what kinds of jobs there will be during the next decade. Now let's consider briefly three aspects of employment that seem to have particular relevance to cooperative education.

Cooperative education can be especially important for the Negro college student and the Negro high school student. It offers one solution for a common three-fold employment problem: Lack of money for education, need of education in order to get good jobs, and need to build confidence in the ability to get and hold jobs. The cooperative plan not only gives the disadvantaged Negro a chance to help finance his education and to get the on-the-job experience that will make him a good job prospect, but it gives him what he most needs: confidence. The expectation that when he graduates he can probably step into a permanent job, very likely where he is training, is particularly important.

Rapid progress in the professional education of Negroes is an important objective. The relatively small proportion of Negroes in professional and technical occupations is traceable, in large part, to their limited education, though discrimination in employment has also been a contributing factor. Only 6 percent of all non-white workers were in these occupations in 1965, compared with about 13 percent of all-white workers.

To enter the professions, Negroes have had, in the past, to overcome the barrier of relatively inferior educational opportunities. Because of their low-average income level, they have also had particular financial handicaps in obtaining a college education.

The major resource for training Negroes at the college level has long been colleges which are predominantly Negro. Roughly two-thirds of all Negro college students attend these institutions. The majority of Negro students have been able to prepare only for professional work in the field of education or, in a few schools, medicine. Their opportunities for training in scientific and technical professions or in business administration have been limited.

The predominantly Negro colleges were unprepared for the sharp increase in the number of recruiters from government and industry seeking Negro college graduates in recent years. Graduates of these colleges with training in science, engineering, mathematics, or business management--of whom there are few if any in these institutions--were those in greatest demand.

One of the most striking developments of the post-World War II period has been the more rapid growth in the employment of women as compared to men. In 1947, roughly sixteen million women were employed; by 1965, their number had increased by more than 50 percent reaching about twenty-five million. By way of comparison, employment of men rose by about 10 percent during the same period.

In 1965, slightly over half of all women between the ages of forty-five and fifty-four were at work; this proportion was about the same as for women twenty to twenty-four. The labor force participation rate for women is lower between the ages of twenty-four and forty-four, the ages during which many families are formed and household and child rearing duties occupy so much of the woman's day. After age thirty-five, increasing numbers of women seek to enter or re-enter the labor force.

Almost three-fourths of all employed women over age thirty-five work in four major occupational groups: clerical and kindred (26.5 percent); service, except private household workers (16.5 percent); operatives and kindred (15.9 percent); and professional and related (13.2 percent). The remaining 27.9 percent are employed in other categories.

Women need to be exposed to educational curriculum that are relevant to today's job market. Women work in almost every field; it is important that their abilities be fully utilized. Preparing young women for all fields of work is in line with the spirit of the Equal Opportunity provisions of the Civil Rights Act of 1964. It also makes good sense from the standpoint of individual potential and the country's progress.

The pattern in many communities is for young people to leave their home towns after they have graduated from school or college. The peak migration rate occurs among those in their early twenties. Of great importance also is the continuing movement to urban from rural areas.

The mobility of young workers is one of the great strengths which undergird our economy. The willingness of young people to move from labor surplus communities to labor shortage areas makes possible the most efficient utilization of our labor force and the achievement of satisfying careers for more workers. Educators have an important role to play here. In many communities, young people need to be trained and guided in terms of the national demand for trained workers so that they will be prepared to seek their place in the world of work when the time comes for them to leave home.

WHAT WE HAVE LEARNED FROM
"ON-THE-JOB" TRAINING

Dennis H. Price

It rather surprised me when I tried to list some of the various areas that might be classified under this general title; I will go over this list with you so that we can see that it is a bigger program than might appear at first.

Let's look at high school cooperative education for just a moment. At that level, you will find such programs as diversified cooperative training appearing under different names in different states. We have distributive education, which is also a cooperative education program. For another special group, we have one called the occupational work-experience program. We find the day-trade cooperative program yet another type. Business and office occupations represent still another, and I would be amiss if I didn't mention the agricultural programs. This is perhaps one of the most perfect forms of cooperative education--that is, basic instruction plus the farm experience of the boy who has spent most of his life on the farm.

Now I would like to move on into another relatively new area. In the technical education areas we speak of the technical cooperative programs. Not all technical education programs can be classified as such, but we do have many. In such programs, the student spends part of his time in his educational program and a part of his time in the cooperative work experience or, shall I say, on-the-job phase of this program. The program that is known to many of you is the collegiate program of cooperative education. The University of Cincinnati has been, perhaps, one of the pioneers in this field. Its program goes back approximately sixty years. The program was generally in the field of engineering, business administration, and applied arts. Three different colleges are concerned with it. The program consists of one year of full-time work on the campus plus four years of a cooperative program (twelve months a year) in the field.

I want to mention apprentice programs in the skilled crafts which are not accepted generally as cooperative programs; nevertheless, they do have some facets of a cooperative program. We generally refer to a 144-hour year related-instruction program, the remainder of the year's program being full-time employment under a craftsman, journeyman, or some qualified worker in the occupation. I would like to include the apprentice programs under the umbrella of cooperative programs. We have others that I think are worth mentioning as we go by: internship in a college of medicine. Usually we think of a two-year internship as being a cooperative type of program where work experience and the proficiencies in the field are brought together. We could also include some professional areas, such as law. The professional and practical nursing fields are so organized that they might also be classified in this area. So we find that cooperative education is not a small program.

I would like to turn next to some of the principles of cooperative education.

First, one of the major principles involves the program of related instruction. This is generally a combination of regular classroom work for technical aspects of the occupation plus a type of related work that is coordinated to on-the-job training. The related work may be either independent or coordinated with the work experience.

The second principle I want to bring forth is the on-the-job aspect of this dual type of education. The on-the-job phase of the program is concerned with the work experience of the individual under supervision. He will take his experiences along with journeymen, craftsmen, or skilled workers, whether it be in an office, a professional organization, an industry, or an institution. As we look at this on-the-job program we find an interesting phase concerned with a rotation of the related instruction with the work experience. This rotation may assume a number of forms. In some of the high school programs, it may mean a person is concerned with a half-day in school and a half-day on the job, and the rotation is taking place daily. We may find other programs of a two-week rotation. A student will remain in school for full time for two weeks; then he goes out on the job for a two-week period of time. In some of the university programs the time is stretched to a longer phase. The University of Cincinnati uses a sixteen-week period of which eight weeks is spent on the job, seven weeks in school, and one week on vacation. It is necessary, under these plans, for two people to occupy a full-time job; so you will find in most cooperative programs two individuals are working in pairs rather than one individual working alone.

Looking a little closer at on-the-job training, we find that most programs provide orientation prior to on-the-job experience. This orientation may be a matter of a year in an engineering program; it may be as short as a few hours in other types of programs. But in any case, it is an orientation that must be made. It is almost impossible to put the student on the job without some prior instruction as to what to expect, what he can do, and especially what he shouldn't do.

On-the-job activities break down into the following general categories: First, we find a planned program of experiences. An individual working in industry doesn't just go on-the-job and be considered able to adjust to the job. He must work under supervision in a planned program. If it is not a planned program, it cannot justify the title of cooperative education. The planned program of experiences usually takes considerable time to establish and coordinate. The activity must be planned for two students, not for one; and the activities are such that as the students rotate on the job, they go through roughly the same experiences as those planned for a single student. The industry or business house has control over the type of activities the students must experience.

Another principle is that of supervision on the job carried out by the foreman or business-house supervisor. In some cases it could be

under the direction of the screening-program personnel within the industry or business. The supervisor may be considered a teacher in the industrial or business program. In many industries or businesses, rather large training programs are established, and most of them are well organized.

Another principle involves coordination. Two people are necessary in a cooperative program: one is the supervisor within the school who must have control of the educational side of the program; the other is the business or industrial coordinator. While the coordinator may be on a school staff, he is actually industry's man on the educational program. He is the one person most concerned with the activities on the job and is in a position to interpret the industrial program to the school. He is the key individual that brings together the curriculum in the school and the work experiences on the job. A strong coordinator is important to the program. If he does not uphold this capacity, the program is weakened and oftentimes can be lost. I will just give you one example to show you how bad we can really get sometimes. An automotive student did his cooperative work in a barrel factory. I can't quite put these two together, but there may be some connection. The work on the job, of course, must be highly coordinated with the work in the school.

Let me look at another facet of this problem of on-the-job training--the development of skills. Many occupations require considerable depth of training in the skills of the occupation. Perhaps it is a craft or maybe it is the operation of business machines. Whatever it may be, the development of skill takes some time. It must be geared to the learning speed of the individual to give him the opportunity to develop the skill correctly and with some depth. I would like to take the viewpoint that we need to get these skills to the state of over-learning so that the person may react automatically.

Another point in the psychology of learning is concerned with negative learning. One individual I talked to some time ago, who was coming into a teaching situation without any prior preparation, was heard to make this comment when asked how he expected to train his students. He said, "Well, I put them to work; I will wait until they make a mistake; then I correct it, and in the correcting, they will learn what is to be done." This is what I would call the negative approach to learning and one that should not be tolerated in an organized educational program. There will be enough of these situations without planning for them.

I would also like to look at the psychology of the pressures under which a person will work. Let's remember we have two situations existing. In an educational program, the learning situation is geared to the speed at which the learner may absorb or may adjust himself to a new problem or new situation. On the job, however, he must meet the pressures that are demanded of others in his production schedule so that one of the problems we have in on-the-job training is concerned with adjusting an individual to the pressures of production. Also, learning on the job includes many little details that cannot be taught in a classroom but must be learned on the job. The things that go on in the average industry day by day and in the average office day by day are often learned by being present or from a comment by a fellow worker.

Another point in the psychology of learning is concerned with human relations under pressure. This is the problem of give-and-take experiences on most jobs. The new learner is generally confused; he has a time adjusting himself, and it takes a sympathetic supervisor to help him through some of the rough spots. It is a rare student who can go into a business house or an industry and make an immediate adjustment.

Let's put some of these things together and see what they mean for us in terms of our topic, "What have we learned from on-the-job training?" As I first examined the problem, I found there were only three or four points that we might put together, but when I try to summarize them and build a listing of items that I can defend, I find that it grows into a rather lengthy list. Some of them overlap, some of them are points open for question, but they represent the things that seem to come to the surface when we examine an on-the-job training program. Let's look at it.

A planned program is a must in any cooperative training program. I want to distinguish between this and the work experience program; in the work experience program the student takes the work as it comes irrespective of a planned program.

A second point I would like to leave with you is that we develop skills through repetition. The law of repetition seems a good one. While the schools can often cover the common skills in a training program prior to the employment of the student, industry itself will require many special skills that must be taught on the job. All of these skills, whether special skills, common skills, or whatever they may be, must be taken to the degree of overlearning. Many educational programs will take a student only through the orientation program stages. He may have a chance to observe, to repeat a process once or twice, and then move on to something else. Too often the objective is to make the introduction to the occupation as broad as possible, and too often the skills are lost in the process so that on-the-job training is necessary to give this background of skills.

Another point that I want to make concerns accuracy and speed. A student on the job must work up to production standards: accuracy first, speed second, and as time goes on, he will meet the production standards of those around him.

Another point is the problem of coordination with related instruction. With the increase in technical education and the attention given to it, we find that related instruction takes on added significance. We find there are two types of related instruction. The first one is concerned with the usual academic programs that will advance the individual as a person--English, communications, and other liberal arts. The second type, and to us the more important, is the technical subjects that are to support his work on the job. It enables the student to meet his production standards and gain the support of his related instruction materials. Technical programs, especially, need to coordinate technical information with the work on the job. Some of the technical background needs to precede the actual work experience, and some of it may follow the work experience or may accompany it.

Many skilled persons who have been on the job many years must go back to school and, through a trade extension program, update themselves in skills and technical subjects. Sometimes industry assumes the full responsibility for this type of program. The training director in one industry made the comment recently that he expected every person on his staff to repeat his collegiate program, whether it be a two-year or a four-year program.

We find that cooperative education is expanding as a training program. The features of the cooperative program are being understood a little better by educators and by leaders in industry to the extent that this becomes a more natural approach to many types of training. We have learned that business and industry have developed a body of educational methods and practices that should help us improve both related instruction and the plan for the on-the-job experiences. While the student is on the job, he has an opportunity to work with others in the give-and-take manner. He develops a philosophy of work after a period of time. I have seen that philosophy change a little from that of a few years ago. I can go back in my own experience when there were no fringe benefits. We worked in a different manner from what we do today. It was so easy then for the foreman to say on Friday, "Well, here is your pay check; we won't need you Monday morning." We have seen the philosophy ethics of the job change--what are the things that are considered acceptable and that are not acceptable; what are the behaviors the student must conform to if he is to work in any specific work situation?

The student has an opportunity to assume responsibility for his work. Sometimes we are overly cautious with students in a school program, and we remove from them all or most responsibilities. On the job the learner must carry his own share of responsibilities, under guidance, and it is assumed that within a reasonable time he will take his place along with the other craftsmen, journeymen, or in an office carry his own share of the work. In an educational program, if a student spoils something, we may say, "Well, that's part of the learning process," and we start over. In industry, spoilage is something else.

The last point that I want to bring out in this list of items is that of developing a tolerance for the ideas and problems of others. I will call it Human Relations. The individual learns to work with others on a give-and-take basis where he must be tolerant of the ideas of others, tolerant of their problems, and not feel that the entire program revolves around "ME" alone.

VOCATIONAL INTERRELATED COOPERATIVE PROGRAMS

Ralph O. Gallington

By way of introduction, I would like to discuss the term inter-related cooperative program. One might say that interrelated cooperative programs are within the broad classification of cooperative occupational education.¹ Another way of saying something about these programs is to point out that they involve work experience programs. The term work experience here is used in its most generic sense. The term work experience itself refers to one type of cooperative occupational education with which some connative concepts have been established. Nonetheless, a vocational interrelated cooperative program certainly makes use of work experience in cooperation with the public school in which the program operates. At this point, I would like to make clear that the interrelated cooperative program is strictly vocational. It seeks to provide students with salable knowledges and skills to make for a smooth transition from school to the work-a-day world.

There are many different types of cooperative occupational education. Some which have been defined are as follows: for general education purposes, (1) work observation programs and (2) general work experience programs; for occupational education purposes, (3) work study programs, (4) internships and (5) cooperative education programs.

Vocational interrelated cooperative programs are, of course, identified with cooperative education work programs. It may be seen from the outset that work observation alone does not allow the students to perform tasks but rather to understand them and to observe them without actually becoming involved with skill-developing activities. The student in general work experience performs tasks of actual jobs for which he may or may not be paid. He is typically engaged for the general education which he is to receive. This is because general education is the main objective of both work observation and general work experience. The work is largely exploratory, and usually one semester or less is used for this exploratory purpose. There are many types of work observation and general work experience programs of education, and in various schools they have various names. Some are out of school; hardly any are non-remunerative type exploratory work. Some are community-service-type work, and some are in-school non-remunerative general-education work experience. Others are remunerative general-education work experience programs in the high school. All work observation and general work experience programs may be offered to help students to explore occupations, to provide them with opportunities to help earn money occasionally, and to motivate potential dropouts to remain in school and possibly provide experience at working so that the potential dropout may develop general personal characteristics which will enable him to get along well with

¹U. S. Office of Education, Work Experience Programs in American Secondary Schools, Vocational Division Bulletin No. 5 (Washington: United States Government Printing Office, 1957), pp. 2-4.

people if and when he does leave the organized school program.² At this point it is easy to see that the interrelated cooperative program is not associated particularly with general education but that it is one in which the student is preparing himself for some specific occupation after leaving school.

The cooperative classes for occupational education purposes are strictly vocational education classes. Among these there are the work-study and internship groups. These programs are particularly useful in preparing people for occupations and may be assumed to parallel an educational program, or they may be held after a formal training program has been completed. Generally speaking, the work experience part or the more commonly known work-study program is particularly one which is carried on in cooperation with an organized educational curriculum. It becomes cooperative at the time the student is still involved with the formalized school program. It is presumed that students entering a work-study program would have had some school training beforehand in order that they might perform well on the job. The school experience would not necessarily be complete in that the student would not be vocationally ready to accept all responsibilities on the job. An example of the school pre-occupational training might be that which students pursue in commercial education, or industrial arts, while working cooperatively. Some boys might be engaged in work experience on-the-job in farm machinery repair while being taught agriculture in a local school situation. This is not dissimilar to the well-known diversified occupations student who has long since been involved with this kind of a training program. Among diversified occupations students there will have been, in all probability, one or two years of industrial arts. The student entering a cooperative program would then be able to carry on more successfully a work-study program. Some have regarded work-study as something "less than" the other more sophisticated vocational programs.

For many years, the internship has been respected and well-known as a cooperative type of training. It has normally been a program which follows a formalized training program in some schools, mostly colleges, in the past. It has been used in the education of teachers, physicians, social workers, counselors and many other types of professional people. Its use is being made more prevalent today in the training of school administrators, accountants, engineers, police administrators, and the like. Normally, we speak of the internship as something which follows a professional or sub-professional curriculum. This like all other cooperative programs is one which is supervised by the school or college which has provided the basic training for the internship. Since we have now identified the vocational interrelated cooperative program with the occupational-education purpose field, since we can see that it is not simply just a "low level" work-study program, and finally since we cannot identify it particularly with internships in general, we must come to the recognition of it as "something new," having its roots in the cooperative education field.

²Mason and Haines, Cooperative Occupational Education (Danville, Ill., The Interstate Printers & Publishers, Inc., 1965), p. 49.

The vocational interrelated cooperative program is concerned with developing outcomes for those who are preparing for the world-of-work. It is concerned with the learnings which every worker needs to know. It is definitely involved with the knowledges, skills, and attitudes which the workers in occupational fields need to have in order to perform proficiently on the job. Although it embraces the common learnings that all workers need to have in order to be good citizens and to become a part of the in-plant organization in which they work, it does give more consideration to the primary goal of occupational competency. The program will be fitted to each student's stated career objectives. The students will be hired by persons who are able to offer a vocational training which is somewhat like an extension of the school's vocational program. The in-plant supervision of the work which is done on the job will be done by a person who might be considered a vocational teacher, an extension teacher, in the plant or industry where the training is to be done. Vocational interrelated cooperative programs are particularly interested in placing the trainee in a position of work where he will be able to do the things assigned him, and his abilities will afford him an opportunity to advance in the work of his choice. In doing this he will fulfill his career objectives.

Now let us consider for a moment the other side of the coin. The trainee in a vocational interrelated cooperative program will have classroom activities in school which are directly related to the job activities and the trainee's occupational goals. These classes or training activities in the school will be conducted by a coordinator or by vocational related-subjects instructors. This again points up to the fact that the program is one of a cooperative occupational education nature. Not only does this program provide the training of individuals for jobs which are of greatest interest to the trainee, but the students selected for the work are selected on the basis of their need and probability of success on the jobs in which they are to be trained. Not only is the coordinator involved with the finding of training stations but also in finding responsible firms that can and probably will provide occupational stepping stones for the student once he has finished his formal school-related training. Interrelated cooperative work is coordinated by a coordinator similar to those who have long since handled programs of diversified occupations, office occupations, distributive education, and the like. This coordinator is obligated to visit the trainee on the job, to discuss his progress with his supervisor or supervisors, to plan learning experiences, to evaluate each trainee's progress from time to time, and to aid in the solutions of problems he may have while on the job. As in other cooperative occupational educational programs, the student in interrelated cooperative programs is expected to earn a salary at the rate which is normally paid a beginner upon his entry into the occupation.

The Interrelated Cooperative Program

The foregoing has presented a picture which is not unlike many other cooperative programs with which you are familiar. What then is the difference between the interrelated cooperative program and other types of cooperative programs where occupational education is the

main purpose? For many years we have spoken of the "services" which are prevalent among State Boards of Vocational Education and the United States. These services have included Trade and Industrial Education, Agricultural Education, Home Economics Education, Business and Distributive Education, and Technical Education. Interrelated cooperative programs are those not especially designed to become a part of any service classification. Their administration is not clearly discernible as the responsibility of any of the well-known services. Therefore, its administration is of a type that demands interdisciplinary service cooperation. Actually, the program should be administered at the state level by a special person who would handle interrelated programs only. At the state level it should be possible that a designated staff member would initiate, approve, administer, and supervise programs of interrelated cooperative programs. A supervisory assistant should be named from each of the pertinent subject-matter services. When this has been accomplished, more than likely we will see the interrelated programs becoming more important in our state and your state as well.

Now what occupations should be served by the interrelated cooperative programs? Let me say that I would recommend that farming occupations involving knowledge and skill in agriculturally-related subjects should be handled as well as distributive occupations, business and office occupations, trade and industrial education occupations, home-making occupations, wage-earning occupations related to home economics, health occupations, fishery occupations, and technical occupations. Any recognized occupation which we have normally considered in the past as vocational as well as the many evolving occupations should be included. Let me ask: How can anyone with a single specialty in vocational education be able to coordinate and administer such a program? Certainly it may be impossible to find one with training in all of the occupations mentioned above by the various services involved. Generally, the instructional coordinator to handle an interrelated class should have had instruction designed to fit him for the occupational objectives of some service or another. Certainly, the coordinator should be a person qualified as a teacher of vocational or technical education in some one occupation or occupational field related to the above broad classifications.

In most states it will be found necessary to provide special training for the coordinators of the interrelated cooperative programs. In addition to the course work required of persons from one of the services, it will probably be necessary to require this individual to have some indication of success as a teacher. In the State of Illinois the qualifications would be two years of successful teaching, one year of cumulative wage-earning experience other than teaching or counseling in schools, and a minimum of twenty-four semester hours of credit of approved courses in the fields of vocational education or guidance. Some states may feel that the person with less than a Master's degree would be unqualified for such a position. In summarizing the qualifications, it may be said that one would need to be trained in one of the occupational services or in the field of vocational guidance; he should have had successful teaching experience other than teaching or counseling in the schools; and certainly an accumulation of college credit would be desirable.

There are actually two kinds of interrelated programs that could be offered in the high school: (1) one of a prevocational non-cooperative nature for those who are not yet ready for work experience; and (2) another of a vocational nature for those who have had preliminary training in prevocational classes and are able to be placed on the job in the vocational interrelated cooperative program. The first of these programs might be considered primarily one of exploration and guidance. Occupational information and vocational counseling should be afforded these students as well as educational guidance and vocational guidance. In the pre-work experience groups, it seems very logical to include vocational counseling sessions and to make certain that each student will have had personal interviews with the counselor frequently and will be able to move with the greatest of ease into the work experience part of the program.

At the state level it will be necessary to watch closely the time which is set aside for the pre-work experience part of the program, and limits should be set with respect to the number of times the student is counseled in reference to the work he is doing in school as well as his objectives, goals, and aims which are to be met later by the work experience. It would seem desirable to specify secondary education classes in occupational information as well as the counseling sessions. For those who are assigned to the cooperative class and who are definitely involved in work experience, it seems that a certain number of minutes be specified whereby the commitment to on-the-job training would be controlled. In some states, fifteen hours per week has been considered as a minimum commitment to on-the-job training, and of that at least five periods a week be given to the interrelated instruction by the coordinator in charge.

Special Needs Served

Interrelated programs often have been considered more especially for schools with less than five hundred students, or in schools within a city or village with no more than five thousand population. To me, these are ridiculous restrictions and possibly provide unwarranted barriers except to the smaller schools. To offset this, interrelated programs in larger schools will be discussed a little later. For the moment, let us consider the values to the small school or small village or city which has heretofore not been able to afford any vocational education.

The smaller school or city where vocational education may seem impractical does provide a desirable atmosphere for initiating an interrelated program. Not only is this small school unable to afford many types of vocational education but it is unlikely that the placement would be possible even if the training could be accomplished. In the interrelated setup, one coordinator could handle a class of some twenty to thirty students and would be able to see that vocational experience was provided as well as to provide the related information which is necessary in all vocational programs. In a small school such as we are now discussing, we could visualize a coordinator of a cooperative interrelated program handling some students in the area of agriculturally

allied occupations, some in the field of home economics and food services, some in the field of personal services, some in the field of health occupations, and possibly some in the field of industrial education as well as business and office occupations.

Next let us consider, for a moment, the possibilities in a large school. Many of our larger schools have good on-going vocational programs which have long since been supported by Smith-Hughes and George Barden moneys. In some instances these programs are meeting the needs of only a few students, and in other schools the needs of many students are met. Regardless, it is very doubtful that the traditional vocational programs ever can meet the needs of all of the needy children who should be getting a chance in the field of vocational education. For those whose needs cannot be met by the on-going vocational programs, it is either a college prep curriculum or a general education curriculum, from which most of them drop before graduation. It is my belief, therefore, that vocational interrelated cooperative programs have a great opportunity to spawn other cooperative programs in large high schools. Just take for instance, a high school which is already endowed with very fine programs of vocational education in industrial education, home economics, agriculture, and business education. Parenthetically speaking, business education programs have not been considered vocational education in the past simply because they have not been supported with federal funds. This may not be the case for long, but at the present, this is probably true in many large schools. Regardless, today we are likely to find a large high school with some programs as follows:

- Homemaking for girls
- Business education for boys and girls
- Machine shop and auto mechanics
- Electronics
- Mechanical drafting
- Agriculture

These fields being rather specific do not appeal to all children. Even though some might profit from taking one of the vocational curricula offered, they would find the training insufficient for the particular jobs they hope to enter. Since their needs are different, it seems logical to consider an interrelated program to help such children find their interests and attain the goals they would like to attain if they could remain in school and do so. You can easily see, therefore, how interrelated cooperative programs might be started in a large school and offer vocational experiences to a number of children whose needs are not being met otherwise. It is doubtful that even a larger school could, for example, hope to put in many of the programs related to the following occupations:

1. Appliance servicing
2. Beauty culture
3. Building maintenance
4. Food services
5. Nursery school attendants
6. Grocery store management

7. Clothing cleaning
8. Clothing alterations and tailoring
9. Hospital aides and attendants
10. Veterinarian assistants
11. Laboratory technicians
12. Librarians
13. Meat cutters
14. Shipping and receiving managers
15. Commercial cooks and the like

Since the interrelated program would allow for many, many occupations to be covered by the coordinator and his instruction, many individual student needs would be met. Not only would they be met early in the initiation of the program, but later it might be possible that some of these occupational areas would grow so large that other cooperative programs could be developed to handle certain phases of the cooperative work. I can see how the interrelated cooperative program in a large school might easily evolve or might spawn other programs such as diversified occupations programs, office occupations programs, distributive education programs, health occupation programs, and possibly agricultural related vocational cooperative programs. All such cooperative programs could be spawned by the interrelated cooperative. If interrelated vocational cooperative education could become a continuous thing, and even if new programs become outgrowths, it is my belief that the interrelated cooperative program should be maintained even in the larger school to take care of the ever evolving individual needs. In very large schools there are always students whose needs cannot be met by regular vocational programs even when the traditional cooperative programs with which we are familiar are included.

Summary

In summary, therefore, I would like to point out that the cooperative interrelated vocational program is one which meets the needs of the large school as well as the small school. It is a program which meets no challenge that it cannot vanquish. It is one which can look forward to the changing industry and business of our times and can prepare for new positions long before specific vocational programs can be set up for them.

It can be seen that I have not advocated that the interrelated cooperative program take over the whole field of vocational education. It seems to me that, rather, it is an innovative type of high level vocational education which can keep alive other vocational services. Also, it should keep alive other cooperative programs of worth which we have known in the past; it should spawn new cooperative programs; and it should stay alive as a vigorous pioneering program.

COOPERATIVE EDUCATION AS A POLICY OF THE NATIONAL
SCHOOL BOARDS ASSOCIATION

Joseph Ackerman

I have often thought about why the United States is somewhat different from the rest of the world, and why democracy means more to us than it does to other parts of the world. There is no question in my mind but that education and the orderly process of responsible self-government are the two indispensable elements for furthering our values and goals. Education is of primary importance in sustaining orderly and responsible self-government. This has been stated as far back as the days of the early Greek philosophers. The authority by which the people are governed in a democracy resides with the people themselves. Government is exercised by officials within the limits set by the people, and the officials are responsible to the people. In an authoritarian form of government the authority resides with the governors or dictators and is exercised over the people, without their consent and without responsibility to them, except as it may be expedient to recognize them with limited concessions.

There is striking evidence in the history of nations that individual freedoms, the quality of citizenship, and the character of public and private morality are affected by the quality of education. Certainly the power of the people to govern themselves can be a vital force and can be used with intelligence and wisdom only if people are well educated.

The power of people to govern themselves will be weak and ineffectual, and lost by default, if the people are ignorant. And so we can emphasize the point that if we in the United States are to continue to have economic growth and to maintain our place in world leadership, universal education is a necessity. Certainly it is the cornerstone of all that is good in a democratic self-governing and forward looking society.

It is at this point that the Boards of Education come into the picture. They have been assigned by the state legislatures the task of translating into reality the American dream of universal, public elementary and secondary education at public expense. We need to be concerned with the following questions: What is the constitutional basis for public education? What is the role of administration in providing and operating public schools? What are the goals? What is the significance of membership on the Board? What is the scope of the educational opportunities that the Boards of Education should provide?

As we trace briefly the origin of the Boards of Education we can see that they evolved from the early town meetings, and we can see control coming from them. Originally the citizens voted at the town meeting to establish and maintain schools, levy taxes, and appoint teachers. Later came the appointment in the town meeting of special visiting committees to see that the schools were operated effectively. Still later committees were established to employ teachers, and special

committees were set up to provide the buildings. Finally the colonial laws sanctioned special committees with specific powers for the operation of the schools. From this developed the movement in the direction of making the town council an ex officio member of the school committee.

From these progressive steps certain general principles evolved. Most states now require by law that local boards of education be chosen directly by the people of the school district for the single and exclusive purpose of operating the schools. In most states, but not all, school districts are physically independent of other units of local government and have the authority to raise revenue from local sources for the support of local schools. Most boards of education have the authority to make and to approve the final school budget. In a few instances it is submitted to the public.

As we review the development of the boards of education, we find they have their legal roots in the New England concept of democracy which regards the importance of the individual, his freedom and responsibility as the cornerstone of community well-being. In order to foster the development of individuals capable of carrying on the responsibilities of citizens in a democracy, the boards of education must have one basic purpose in mind, that of providing educational opportunities for the youth of their area.

A board of education alone, however, cannot provide good schools, particularly if the district over which it presides is inadequate in size, or if the attitude of the people is such that they will not support a good educational program. The board needs to recognize that one of its main responsibilities is to create the proper educational environment and exert a wholesome influence in the community. Of equal importance, the board must have a knowledge of the educational needs of the community and an understanding of how these needs can be met.

It is essential, too, that boards of education have an informed, sincere, aggressive leadership if they are to take concerted action in the communities. The people can determine the kind of educational program they want. However, people are often confused, uncertain, indifferent, or inarticulate about the kind and amount of schooling they wish for their children as well as the quality and effectiveness of the educational program. Then, the politicians and others, with little interest in the schools, may make the decisions, thus, youth and the community may suffer.

The school system needs to reflect the community requirements. The professionals that are hired to operate the schools will be at sea unless the board properly interprets the needs and provides guidelines for areas of emphasis and methods of operation. Therefore, the board member must know his community intimately and must understand the educational aims and philosophy of his fellow citizens. Professional educators are trained to design and operate a school system that fits a pattern, provided the board of education provides the blueprint and the direction.

The framers of the national constitution did not create a national system of education but left the direct responsibility for it to the states. These leaders were aware of the importance in a democracy of developing an educated citizenry who would use the right to vote with responsibility and intelligence. They recognized the moral responsibility of the national government by making provisions for the states to act in their own interest and in the interest of the general welfare of the nation. The Federal Government provided for establishment and maintenance of public schools by territorial governments as new territories were acquired. Thus, today, it is the responsibility of the fifty states through their constitutions to provide public education for its citizens.

In most states the state constitution places a mandate upon the legislature to provide for establishment and maintenance, at public expense, of schools which are equally available to all. Thus the state legislatures have the primary jurisdiction and can provide whatever form of local organization they may choose. This is the reason for the great variety of programs throughout the United States. In general, however, all the powers of the school districts in the state are delegated by the legislature and not delineated in the constitution. One exception, however, tends to be the constitutional or statutory restrictions on the power to tax.

The goals of our public education arise from the meaning and the values of our democratic society. They are as old and as lasting as our democratic ideals. There are various kinds of goals in the same sense as there are varieties of needs and desires. Educational goals are often stated in various ways, but they always reflect the significance of the balance between individual freedom and general welfare, between the selfish and the altruistic, between competition and cooperation, and between rights and responsibilities. The emphasis always includes the learning and acceptance of these values and the rational application of them in our private as well as our public lives. They are often expressed in terms of productive, competent, ethical citizenship.

Educational goals are often expressed in terms of the capacities of individuals and richness in personal living on the one hand and contributions to society and enrichment of the lives of others through the sharing of talents on the other hand, whether this sharing be through the cultural, scientific, social, religious, economic, or other aspects of our life.

Some of these goals are expressed in terms of subjects to be learned within a specific time. Each individual has some notion of his educational goals although this is not as frequently emphasized in our schools as might be. Parents have goals for their children; teachers have goals for their pupils. Communities also have some sense of goals for their schools. Sometimes these are set down clearly, particularly when boards of education, along with their administrators, have given effective educational leadership to such communities. Some of the states, through the pronouncement of official agencies, have

also expressed educational goals. In many instances they set up commissions to spell out their goals. The National Education Association has prepared statements as guides on deciding what to teach in a changing society. Its goals and values appeared in an official report of its National Committee on Project on Instruction.

The responsibility of a board of education should be found in the statement of its policy. Boards of education more than any other agency have the direct and immediate responsibility of insuring the attainment of educational goals in the elementary and secondary schools in their communities and in the nation. This is, in fact, the only reason for the existence of the boards of education and it seems, therefore, reasonable to expect them to set forth in clear, definitive terms, the goals which the people of their state and of their community wish them to attain through the public schools which they operate for the people.

One of the major goals of education is to prepare youth to qualify for, and hold a job--one that will help them to achieve economic security and to live satisfying, successful, and useful lives as family members, workers, and citizens.

The educational needs of all youth cannot be met by a single uniform program of instruction. Equal educational opportunity does not mean identical education. A varied curriculum must be provided if the school system is to give pupils, who have individual differences, opportunity to develop their potentialities. Too often in the past we have rewarded conformity and have discouraged creativity. We need to provide sufficient classroom space and opportunities for divergence, and teachers should be encouraged to discover and nurture talent.

As pointed out in a set of leaflets, "Occupational Education and Training for Tomorrow's World of Work," prepared by the North Central Public Affairs Committee, yesterday's education is not sufficient to prepare today's youth for tomorrow's world of work. The problem of preparing for a job has always been a critical one; it is aggravated in the present decade by revolutionary advances in knowledge and technology that keep the nation's business and industrial complex in a continuous state of change. Changes in the way an industry produces a commodity have brought about changes in the way a man can earn a living. The joblessness that results from people's inability to change and develop the skills required by the changing world of work is a serious problem today.

Changes in the world of work have been accompanied by an unprecedented growth in the U. S. labor force. The total labor force in 1970 will be about 87 million. The 26 million young workers entering the labor force between 1960 and 1970 are far more than the country has ever had to educate and absorb into employment in any previous decade. The increasing size of the group is certain to mean increased competition for jobs, especially for the kinds of jobs in which young people normally find employment.

More and more occupations now require skills and specialized knowledge. While in colonial times most people in America were engaged in farming, fishing, hunting, lumbering, quarrying, and homemaking, there

are now more than 22,000 different occupations known by over forty thousand different job titles. The nation's more than seventy million workers are employed in jobs ranging all the way from the so-called unskilled occupations to the professions requiring years of specialized training. The process of specialization is continuing, and with it comes not only new and different job or vocations, but also many far-reaching social and economic changes. Those who adapt to change usually gain in income and personal satisfactions. For those who do not, the cost is usually great. This cost is borne by every American in terms of higher consumer costs, increased welfare costs, and loss in productive resources due to under-employment or unemployment.

Approximately 5 percent of the U. S. civilian labor force, or about four million persons, were unemployed in 1965. These figures indicate that the economy is not fully utilizing its human resources. Unemployment among young workers has consistently been higher than for the rest of the labor force because of the problems which face new workers entering the labor force: lack of training, little identification with an industry, inadequate knowledge of the labor market, and vulnerability to layoff due to lack of seniority. Young workers are entering the labor market today in rapidly increasing numbers, and the unemployment rates for these age groups are also increasing very rapidly. The highest rate of unemployment is found among job seekers sixteen and seventeen years of age. High school dropouts experience two to three times as much joblessness as do graduates.

One of the most frequently offered solutions for unemployment is more and better education and training. More schooling does not necessarily mean going to college. Not everyone need go, or should go, to college. There are many educational activities that can offer rewards in job satisfaction and income. One of the most important of these activities is the high school vocational program, which combines practical vocational training with academic education to produce employable graduates. The high school vocational program allows those who do not plan to go to college or take post-high school training the opportunity to learn a marketable skill while in school. It provides the student with a sense of accomplishment and dignity. For the potential dropout this training can be an important factor, which may induce him to remain in school and become employable. Some programs combine employment with schooling.

Studies show that in communities where students are not offered adequate vocational programs, the dropout rate was three times as high, and the unemployment rate was eight times as high as in areas with such educational opportunities. In Milwaukee, which has one of the best vocational education systems of any large city in the United States, the school dropout rate is only 5.5 percent compared with a United States average of near 40 percent.

There is also a need for nonacademic training after high school. This need might be met by the broad scale community college which combines vocational-technical training with lower level academic education, adult continuing education, adult remedial education, and retraining. Other means of meeting the need include area or private

vocational schools, public or private technical schools, junior colleges of various kinds, and special federal or state remedial and retraining programs. Systems of earn-while-learning appear promising as do education and training provided on contract by industries.

Effective programs to combat unemployment are costly. But society pays a much higher price for unemployment in terms of youth delinquency and the waste of the abilities of thousands of citizens who cannot find their proper place in society.

We must always keep foremost the thought that the strength of the nation lies in the hearts, minds, spirits, and consciences of the people. The nation's welfare lies not in the laws of government but in the honesty and moral responsibility of its citizens, which is acquired through an effective educational program. Educators must be aware of their role of service and leadership if we are to have a better tomorrow for our children and if we are to see the full realization of our nation's democratic ideal.

PSYCHOLOGICAL EFFECTS ON STUDENT-TRAINEES

Ralph M. Stogdill

I should like to begin my talk by describing a situation. To begin, it appears to me that the educational establishment as a whole is not keeping pace with the other major institutions--political, economic, and religious--in our society. Too many of our young people are required to leave school without having encountered any experience or training that equips them to cope with the modern world. Despite the fact that we in the various professions like to blame all our problems on the home, I cannot believe that the home is responsible for our own backwardness.

Children are required by law to attend academic school whether or not they derive any real benefit from it. Many children who are wasting their time in academic school could profit from vocational training that is suitable to their aptitudes and abilities. However, because they are too young, below average in intelligence, present behavior problems in school or in the community, or for some other related reason, they are not regarded as suitable candidates for the cooperative education programs in many of our schools.

It seems to me that we who are interested in vocational education cannot afford to wait the several decades that will be required for the academic establishment to wake up to its responsibilities. We need to recognize and accept our responsibility for every student who can profit from vocational training, no matter what his physical, intellectual, or emotional handicaps may be. The student should not be compelled to leave school or depend upon some external agency such as the Neighborhood Youth Corps to get the training that he needs.

If we open the vocational program to the large numbers of deprived and socially maladjusted students who need it, we shall need the best possible understanding of their problems. We shall also need an understanding of factors that influence their adjustment to the work place. Fortunately, there exists a large body of research literature that can assist us.

I should like to summarize very briefly some of the research findings on factors related to job adjustment. In the time available, I can do little more than hit the high spots. A survey of the literature indicates that both individual and environmental factors influence adjustment to the job. The same variables influence adjustment to training, but not always in the same way that they affect work adjustment.

Individual Factors

Let us consider the individual factors first. Age, sex, and race are individual characteristics that are determined by birth. They are important because they operate as barriers to employment, and to training

as well. A person is never the right age for an available opening when jobs are scarce. Women find it difficult to enter various occupations. Race operates as a still more serious barrier to the desirable occupations.

Physique and health are more critical factors in some occupations than in others. Poor health is more frequent among the low-income groups. It is also associated with high accident rates and absenteeism. Health is not highly related to task performance.

Ability, skill, and knowledge are important determiners of job performance at all occupational levels--semiskilled, skilled, and professional. The three variables tend to be intercorrelated. That is, high verbal ability, knowledge, and manual skill tend to go together. There are exceptions, of course; but we know from years of practical experience that failure in academic subjects is not necessarily predictive of success in manual trades or vocational training.

Individual personality and pattern of social interaction are also related to success in job and training. Personality difficulties are far more frequent than unsatisfactory job performance as causes of discharge. In fact, persons with severe personality disturbances may do highly satisfactory work. But persons with emotional problems may find it difficult to obtain or hold a job because of inability to get along well with supervisors and fellow workers. Personality problems are often related to low job satisfaction as well.

Recent research indicates that expectations, aspirations, and reinforcements play a much more important role in adjustment to job and training than was believed possible in years past. It is not the absolute value of a reward, but the individual's reaction to it, that reinforces or depresses performance. Pay either higher or lower than expected is related to job dissatisfaction and turnover. Failure to satisfy expectations relative to job assignment, working conditions, pay, and advancement are associated with employee dissatisfaction. Young people often entertain expectations and aspirations that cannot be easily satisfied because they are unrealistic. Work experiences that enhance the individual's sense of accomplishment and self-esteem tend to be associated with job satisfaction.

Recent research has also shown that an individual's membership in various social, occupational, and ethnic groups tends to determine his values and his acceptability to other groups. The groups with which he compares and identifies himself tend to determine his aspirations and satisfactions. An individual tends to be better satisfied with his job or with training when it is highly valued by the groups with which he identifies himself.

I have noted six sets of individual factors that condition adjustment to work and training. These are: (1) age, sex, and race; (2) physique and health; (3) ability and skills; (4) personality; (5) expectations and aspirations; and (6) social class and group identifications. Certain of these tend to be interrelated in that the individual

who scores high on one of the factors tends to score high on one or more of the others.

Environmental and Job Factors

The school and the work place are located in a larger community environment. The community contains numerous elements that determine the nature of the schools and jobs that will be located in it and associated factors that condition the individual's reactions to school or job.

Community norms, for example, determine the nature of the jobs that will be available to individuals from different social classes and ethnic groups. Family, social class, and occupational norms determine the kinds of jobs that the individual will be willing to accept and also his willingness to acquire the training necessary for occupational advancement.

As the technology of a society becomes more complex, the demand for trained personnel increases. Also as technology becomes more complex, more levels of authority are required in the workplace, and the worker tends to lose control over the jobs. Thus, he needs not only better technical training, but he also needs to subordinate his own inclinations in order to adapt to the job.

Changes in technology involve changes in task performance. New jobs in the future will require less in the way of physical skill and more in the way of technical knowledge, judgment, decision, and responsibility. In other words, there will be greater demands for predictable and reliable performance, both in relation to task performance and to personal interactions.

Among the community and job factors that affect adjustment to work and training are (1) community structure and norms; (2) occupation and technology; (3) the structure of the workplace; (4) task demands and opportunities; and (5) dependability of performance in relation to the job and fellow workers. These factors interact with each other and with individual factors to determine job adjustment.

We have considered eleven classes of variables--six individual and five environmental--that determine adjustment to the job. They also condition adjustment to school and training. Each class of variables is complex in nature. The variables interact in various combinations to determine adjustment for different individuals. It is apparent that we do not have any simple formulas that will enable us to understand the problems of our students in school or on the job.

Several factors contribute to the high dropout rate and to maladjustment in educational programs. One of the most potent of these is the pressure exerted by the values and norms of groups and individuals with whom the student most strongly identifies himself. A boy friend, girl friend, or group of friends, is a particularly powerful source of pressure. If the student believes that dropping out of school will enable him to participate more satisfyingly with his friends and

enhance his status and respect, and if this idea is reinforced by his dominant reference groups, he has a lot going for him in the direction of dropping out of school.

A second factor, almost as influential as the first, is the school situation itself. If the academic program of the school has provided the student with several years of failure, discouragement, debased self-respect, and resentment against continued pressure for achievement, he is likely to expect the same outcome in the vocational program.

Reference group identifications added to experiences of academic failure combine to produce a third factor that makes it difficult to persuade the young person to complete his schooling--academic or vocational. This factor might be called the authentication of communications. These are big words, but they identify an important reality. The discrepancy between what adults say is true and what the student perceives to be true tends to invalidate adult communications. If we have provided the student with numerous experiences of failure, he comes to expect further failures. The difficulty is further complicated by the fact that dominant reference groups issue communications that are received by the individual as being authentic. Such authenticity is anchored in emotion, values, and group norms which, as we have noted, exert powerful forces upon the individual even though they may have little relevance to what actually exists in the world about us.

If we want our communications with the student to be received as authentic, we need to start the very first day he attends school, and continue thereafter, to provide him with experiences that reinforce his sense of self-esteem, and ability to cope with the world of people and things. We need to provide the same experiences for the other children in his classroom and for his playmates in the neighborhood. What happens to him, what he sees happening to his friends, and what they say to him, all influence what he will do.

The factors that I have discussed to this point merely indicate the complexity of the problem confronting us when we attempt to assist a vocational student who presents an adjustment problem in the classroom, or when we try to persuade a reluctant student to complete his schooling. If we want the student to believe what we tell him, we must provide him with experiences in the classroom that validate for him personally what we say to him. It is not enough that we perceive the truth of what we are saying. It will appear true to the student only if his own experiences demonstrate it to be true.

I return now to what I said at the beginning of this paper. The academic program is such that it frustrates and discourages many of our young people and alienates them from school. The vocational program, if it were enlarged and adapted to the needs of students with varying levels of ability and aptitude, could keep many of them in school and equip them to make the best possible contributions of which they are capable. Finally, I believe that we tend to underestimate the capabilities, not only of the most capable but also of the least capable, of our students. Most of them become self-supporting and valuable members of the community despite the little that we do for them.

The school has made a promise to our students. If those who are responsible for the academic programs continue to ignore that promise for a considerable proportion of our students, I believe that we who are interested in vocational education should exert ourselves to the utmost in an effort to fulfill their disappointed expectations.

EMOTIONAL, EDUCATIONAL, AND SOCIAL ASPECTS OF COOPERATIVE EDUCATION

Chrystine R. Shack

The purpose of this paper is to examine the emotional, educational, and social aspects of cooperative education with some special reference to the disadvantaged.

A well-conceived cooperative program answers a vocational need for many young people--and particularly, the disadvantaged. It is, therefore, one of the critically important programs in secondary education and as such, merits periodic examination.

A 12th Century Hebrew philosopher wrote: "There are eight degrees of charity . . . the highest is to aid a man in want . . . by providing work for him so that he may become self-supporting."

Ours is a nation characterized by heterogeneity--a nation in which its many peoples neither look, live, think, nor act alike--a people so characterized cannot be identical in their abilities, aspirations, hopes, or accomplishments.

It follows then, that among our millions of secondary school students, there are those whom we have come to identify as "disadvantaged."

This term has been interchanged with such descriptive identifications as deprived, under-achievers, uneducables, non-learners, handicapped, and alienated. Intellectual, social, and emotional inadequacies are experienced by this segment of our secondary school population. Any large typical American high school has a significant number of disadvantaged students: some by reason of their lack of high academic ability; some by reason of poor motivation resulting in underachievement even in instances where the ability may be high; some by reason of neglect resulting in socially undesirable behavior; and some by reason of the fact that they come from economically and culturally deprived homes and exhibit one or more of the deficiencies previously cited.

Our advanced society has prompted a new and concerned awareness of the disadvantaged--it has further propagated efforts to understand both the differences which serve to distinguish them and the similarities which relate them to other students. This awareness has further spread to the educational realm where vocational educators and a growing number of academicians have adopted Conant's theory of the ideal in American education--"education for all the children of all the people," embracing also, the disadvantaged.

Our public school authorities, in an attempt to meet the needs of all youth, have made valiant efforts toward the establishment of "the comprehensive school." These efforts have been exemplary, but the concept of comprehensiveness has not yet been accepted by all educators. The needs of the disadvantaged would be met in such a school. Their needs, as is the case for all youth, include the provision of effective prevocational education and ancillary services which will equip them

for vocational adjustment. They need an education which enables them to find satisfactory employment and, at the same time, one which fosters the development of their self-confidence and their productivity.

More than ever before, the American high school has the inescapable obligation to provide for every student who reaches this level of education that education and training which will prepare him for the next step in his life. In failing to provide such preparation, our schools contribute to an intolerable waste of human resources and the composting of grave social consequences upon society . . . unemployable persons, increased welfare costs, delinquency, crime and a sense of futility or frustration on the part of those who are the victims of such deprivation. A man void of occupation or work performs no function in or for society. James Baldwin in his Fire Next Time states: "The most dangerous creation of any society is a man who has nothing to lose."

Among the emerging programs designed to meet the needs of these and all students, is that of cooperative occupational education. In a discussion of the provision of cooperative occupational education for disadvantaged youth, one needs first to identify the disadvantaged--who are they, what are their disadvantages, how can we recognize them, and in what way can we serve them?

The findings of Havighurst and Stiles, as reported in A Statement of National Policy for Alienated Youth, indicate that a significant number of the disadvantaged (some 15%) have intelligence quotients which place them within the range of the slow-learner with IQs of seventy-five to ninety. Their intellectual ability is below that which we consider the "norm," but they are not as intellectually limited as the "educable" or mentally retarded. "Such youth," they reported, "have been unsuccessful in meeting the standards set by society for them--standards of behavior, of learning in school, of performance on the job. Upon reaching adolescence, these youngsters may be identified as the misfits in school. They are either hostile and unruly, or passive and apathetic. They have quit learning and have dropped out of school psychologically two or three years before they drop out physically."

Disadvantaged youth can be found in all ethnic groups, IQ ranges, and from middle and upper class homes. Any child, void of recognition, attention, interest, and emotional security, becomes disadvantaged. However, low income status often characterizes the home of the disadvantaged as well as a myriad of social problems contributing to emotional and cultural inadequacies. Additionally, their disadvantages include slow learning rates which make it difficult for them to meet the standards imposed on them by the regular academic curriculum . . . usually geared to average and above average learners. They experience academic retardation accompanied by the gnawing frustration of grade failures. It follows that they are generally over-age for the grade placement which leads to feelings of inadequacy and inferiority and an undermining or even destroying of self-confidence. The disadvantaged youngsters struggle with a program designed for more able students

because no special instructional or training programs are devised for them. Succinctly stated, the disadvantaged suffer a plethora of emotional, educational, and social inadequacies.

There are evidenced emotional deficiencies including:

1. a serious emotional or psychological handicap
2. an active antagonism to teachers and administration
3. an unhappy or unpleasant family situation
4. a tendency toward discipline problems

We are similarly cognizant of educational shortcomings such as:

1. below average grade placement
2. low scholastic aptitudes
3. low reading abilities
4. marked disinterest in school and a feeling of not belonging
5. failure to achieve in regular school work

These emotional and educational deficiencies are compounded by plainly visible social liabilities such as:

1. decided differences from peers with respect to size, interests, social class, mode of dress, and personality development
2. non-acceptance by staff and peers
3. friends who are considerably younger or older
4. delinquency tendencies

These are the students whom we must help to discover themselves--discover themselves in terms of who they are, what they are, where they are going, and what they can make of themselves. They need to know and be confident of their own abilities; they need to know their weaknesses and what they can do about them.

I submit to you that the void with a great many disadvantaged youth is one of competence, not capability. Unless they see what education can do for them, they will waste time as "attendance law prisoners" dropping out at the first opportunity. They need a wider acquaintance with job possibilities and realistic knowledge of what is involved in preparing themselves for jobs which interest them.

A dearth of opportunities for the disadvantaged make cooperative education a "must." Work itself can be educational and, very likely, a more applicable form of education for the disadvantaged in that it combines the tangible with the intangible. Cooperative education will help the under-privileged or deprived student find himself and the best role for him in relationship to society.

Give any student work that he can do--work at which he finds a measure of accomplishment and you have given him, in my opinion, impetus to an improved psychological attitude and elevated aspirations. A distribution education coordinator related to me the story of Bob Holloway who had endured the basic business education tract for three of his

senior high school years. The student had endured this pattern because his ability level was not adequate to the more demanding bookkeeping or stenographic patterns in the high school, and vocational trades and industries programs were completely lacking. This meaningless program provoked little enthusiasm nor did it heighten the aspirations of the student. A program of distributive education became a part of the high school curriculum. In his senior year, Bob was enrolled in the program. A heretofore hidden effervescence emerged. A slight of stature, yet neat and personable young man found his niche in selling at a local boys' clothing haberdashery. Within a few short weeks he was heard commenting to his high school principal: "Our D.E. program is the best thing that has happened here at Hamilton High. I'm working at a job I can really do. I help others and help myself. Besides, I get paid for doing it! It makes school worthwhile." The same student was subsequently accepted as a conditional student in a post high school distributive education program. The provision of cooperative education cannot be realized, however, without a basis of development. We think of cooperative education as the outer circle of a concentric circle of training. The inner circles include knowledges, skills, and abilities the student needs to have, and a nucleus of personality development, poise, social maturity, and empathy for others. It is not enough to equip the student with manipulative skill or manual dexterity. Rather, we must aid him in the acquisition of the added capabilities if he is to function successfully in the world of work. The disadvantaged require knowledge in basic academic skills: reading, writing, listening, speaking, mathematics, ability to find and organize information, and ability to think.

Our educational system tends to reinforce the good students and to give little attention, or provide less than the necessary help for the disadvantaged students. What then can be done to supply the needs of the disadvantaged? Should education change the curriculum for the disadvantaged? No, simply begin the instructional program at a level that can be understood by the disadvantaged child and through slow, gradual steps, help him improve and raise his ability level.

As in the experience of all initial learners, the disadvantaged are concrete rather than abstract thinkers. Therefore, attention should be focused on sensory rather than verbal aids. Instruction should be at the perceptual level as much as possible . . . teach by showing, by doing, by using gestures, posters, pictures, role playing, diagrams, and examples.

I am reminded of an incident involving a twelve-year-old migrant child, with the unusual name of Judge Wilks, whose scholastic aptitude placed him among the second grade students in our New Jersey Migrant Demonstration School Program. On the contrary, Judge's experiences and knowledges regarding farming and farm apparatus could be likened to that of a young adult. Judge had followed a migratory pattern with his family for all of his twelve years. On a school trip to acquaint the students with community helpers and resources, the fire station was visited. The fireman talked of fire monitoring sprinkler systems which were a part of many new buildings within the community. It wasn't too easy for Judge to understand or visualize "an automatic sprinkler"

triggered by a fire impulse, but we found ready acceptance of the idea when we associated it with a sudden shower or sprinkle (in Judge's language) which brought relief on an unbearably hot day or even the rotating lawn sprinkler used on the lawn of the farmer's home. Judge surprised all of us following these examples by his perceptive ability. He chose to relate the automatic sprinkler to "the i - ri - gation work his father was doing" when he boarded the bus for migrant school classes that morning. Most assuredly, we expounded on the irrigation on our return to the classroom, making it a part of our instruction.

Emphasis should be given to activities which involve oral expression--here the teacher can build vocabulary, correct language usage, and increase depth of comprehension. Through conversation, verbal skills are developed. Verbal stimulation is often absent in the home of the disadvantaged.

Initiating activities in which they can personally be involved and actively participate could provide stimulation for a more intensive search toward independent exploration. Making use of the innate curiosity they possess may help to open up avenues for further advancement. By no means should the disadvantaged receive a watered-down version of education, but if they are to be reached and subsequently reap profitable gains from their education, their learning experiences must be adapted to their style, interests, and needs.

A general education program which has meaning and importance for these students will help each to learn at his own level and pace. To fit the educational needs, we must then create and implement individualized curriculums. Similarly, we must provide counselors and classroom teachers whose training is geared to serve effectively the disadvantaged child. Better counseling, especially in the guidance area, is needed in the junior and senior high school.

Enrichment programs, even at the pre-school level, are necessary so that disadvantaged youngsters do not enter school with a learning deficit. Enrichment and remedial programs are necessary on a continuing basis all through elementary and high school. The instructional program should be a flexible one with an abundance of supplementary and vitalizing learning activities. It should include study trips, resource visitors, and many audio visual materials to broaden backgrounds and to make sure the students learn even though they have impaired or limited academic skills. Audio visual aids, programmed instructions and concrete aids help these students grasp knowledges considered vital in the learning process. Specially conceived instructional materials including textbooks and the supplementary materials are mandatory. Half-way measures will not do. It will not help to give a senior-year disadvantaged child whose learning skills need rebuilding a tenth-year book if what he needs is instruction at the seventh-grade level. He will be as helpless with the tenth-grade "easy book" as if he were wrestling with the twelfth-grade book he cannot use. It will not help to explain the processes of decimal fractions over and over to a child who still gets the wrong answers when he adds. Our programs for the disadvantaged should go back as far as necessary, without reservations as to how far that "ought to be." The student can then take the needed steps and sometimes quite rapidly indeed.

I must stress, that the voids with the disadvantaged are not permanent, fixed, or unchangeable. They are voids which can be rectified as a function and a responsibility of education. The individualized curriculum should have a structured pattern and provide a planned approach to the mastery of needed basic education and vocational skill development. The educative process satisfies the acquisition of knowledges, but what about the inner core--self-development?

No longer is the teacher merely master of language, or mathematics, or reading. Of necessity, the teacher must become the agent of the entire educational process with the disadvantaged child--concerned certainly with the acquisition of knowledge and the development of mind and cognitive abilities, but concerned also with the totality of the learner. Intellectual learning involves emotional learning, and the two must interact. The disadvantaged student must be guided in the development of personality, poise, social amenities, and person-to-person and intergroup relationships.

A cooperative occupational education program places great demands on the inner core, for it requires adherence to an adult code of behavior, appearance, and performance. The disadvantaged child needs to be recognized as an individual whose personal welfare and progress are important. Elevating his personal image increases his understanding of other people and his ability to work with them. To change the attitude of the disadvantaged student toward himself, others, and society, the teacher must be warm, understanding, and sympathetic. Learning activities should be carefully chosen to focus on important understandings and to mold attitudes and values. The social values of the teacher are most often transmitted to the disadvantaged student. For him, the interested teacher is an identification figure to be emulated. Continuing efforts should be made to improve the student's social concepts of dress, appearance, manners, speech, and participation.

Sue Majeski came from a broken home where little parental attention or interest was given the several children already in junior and senior high school. The mother probably thought of them as self-sufficient and viewed her forced freedom as a result of desertion as a recreational outlet. In this environment, Sue and her teen-age sister developed weird patterns of dress, coiffure, and make-up. Sue experienced no difficulty with the mastery of dictation and transcription and their companion secretarial skills. She was thus vitally interested in the cooperative work experience program in office occupations. During the initial six weeks in school and preceding actual cooperative employment, precept and example on the part of the teacher soon beguiled Sue and one problem--that of dress--was solved. The highly piled coiffure and ice-like make-up, then the current fads, were not so easily abandoned.

This was accomplished, however, when Sue was interviewed at an employment station along with two of her classmates. Each girl possessed the skills for the particular vacancy and the ultimate selection was to be based upon intangible factors of personality, appearance, etc. The interviewing personnel manager abhorred such hair fashions and make-up. Sue was not selected.

Self-evaluation in conjunction with the teacher ferreted out her probable liabilities. Sue had passed a hurdle of self-development. On her next interview, she was selected, and her student employment led to permanent employment upon graduation. Self-confidence, self-esteem, and feelings of worth, strength, capability, and adequacy aid the individual in coping with his environment.

The final perimeter of the referenced concentric circle of training is that of cooperative occupational education. For disadvantaged boys and girls, vocational guidance cannot wait until high school. They can and should learn about many kinds of jobs from the time they first study their own neighborhoods and towns. Experimentation might be undertaken with work experience programs starting as early as the seventh grade of the junior high school, continuing through senior high school, and leading to graduation. Such a program should, of course, have the proper sequential development with the staffs of both junior and senior high schools working together on the development of curriculum and types of work experience.

Important stress should be placed upon people at work. An organized study of vocations should be included in the seventh or eighth grade with adequate practical and specific information about the advantages of a wide variety of jobs and the preparation required for them.

The State of New Jersey has recently initiated a program in "Introduction to Vocations," which might interest you. Girded with these facts, the disadvantaged can be guided in the establishment of strong and practicable goals for themselves. Goal-centered children are the best guarantee for continuity of training and ultimate accomplishment.

The concentric approach toward readying the disadvantaged child for employment should, for the most part, satisfy the needs of these students. Conceivably, a program which aims to instill basic educational requirements, skills and abilities, social cognizance, and occupational intelligence should lead to a preparedness for practical work experience.

Moreover, the properly exercised coordination activities would provide an ideal selection of work station--a job which is suited to the individual student's personality, capabilities, and potentialities.

However, idealism is not always realism, and we might expect to find some, in my opinion a minority, of the total disadvantaged student population whose needs dictate a sheltered or protective employment situation. Protective or sheltered work experiences might well be provided in four stages:

Work Exploration--designed for those having little or no work experience. During a specified period of time, the students try out a number of job types in an effort to determine their vocational choices.

Work Study--wherein the student would work during the summer prior to participation in a cooperative program as an employee of the school or any other public employment situation.

Work Projects--where the students complete job assignments within a sheltered environment under the direction of a familiar supervisor. A contract plan of operation might be employed.

Actual Cooperative Work Experience--where the students work with an outside employer. The employment station should be fitted to the student's skills, social and emotional development.

We do not espouse the theory that cooperative occupational experience for the disadvantaged should be afforded solely through sheltered employment, but we do recognize its worth for those students whose emotional, educational, and social development dictate such employment experiences.

Disadvantaged children develop, in many instances, a natural protective covering as well as avoidance practices which result in placing veritable controls on their performance and in dulling their incentive. Protective employment, in some cases, would lend itself toward magnifying this presentiment.

Moreover, protective employment places the onus of continuity and accomplishment on the student, for we, in essence, are saying, "you have been provided the ultimate in training and job opportunity--if you do not succeed under such circumstances, you cannot succeed at all." Such an attitude belies the responsibility of our schools to the disadvantaged child--that of providing appropriate opportunity (in relation to the individual's abilities and personality) for a modicum of success.

Vocational education has a unique obligation: Ours is the task of exerting that concern and influence which will serve as the mainspring for significant changes in the lives of the disadvantaged. If we wish to develop citizens who are self-assertive rather than servile, self-sufficient rather than dependent, self-productive rather than parasitic, we must embark upon a course of action which will provide for the disadvantaged an opportunity for achievement commensurate with their ability and befitting their dignity as members of the human race.

EXPERIENCES WITH THE WOMEN'S JOB CORPS

Virginia Keehan

I would like to share some concepts, ideas, and experiences in working with disadvantaged youth who have joined the Job Corps Program. The Job Corps has taken but a small portion of these uncommitted youth and attempted to train them in a skill.

These young people receive basic education instruction, instruction in pre-employment skills and knowledge--then the direct, purposeful, on-the-job-training planned by the Vocational Education Department with the basic education instructors. Mobility of young people is a strength--they are willing to move where the jobs are.

The Job Corps provides residential centers for young men and women sixteen through twenty-one in a coordinated program of basic education, shell training, and constructive work experience.

WHO THE GIRLS ARE: The women are the children of that under-developed nation that lives among us . . . the children of the poor. Who these girls really are, and who they will be, we are just beginning to know. Their vast potential has never been tapped. What we do know about them is this: They range in age from sixteen through twenty-one. They are technically not ready for employment through lack of education and lack of training. And we know this: Each one has the intelligence and the will to change her lot, if given the chance.

WHAT THE JOB CORPS HOPES TO ACCOMPLISH: To help young women rise above their environment, and to escape from the ever-downhill path that their mothers have had to follow--the Job Corps gives them a truly fresh start. The girls' experiences hopefully will provide the support they need to find that they are persons of value and have some contribution to make to society.

In an age of prosperity, when the economy is rapidly expanding, when unemployment is decreasing, and when new jobs are constantly being created, it may be easy to be confident about the ability of youth to find jobs and to be confident about the adequacy of the vocational education that they are receiving. In fact, however, there is a serious discrepancy between this rosy over-all picture and the situation which faces many of today's youth, especially certain segments of them--the poor, the unskilled, the uneducated or poorly educated, the members of minority groups--the women. Many of these new entrants into the labor market are unable to meet its demands for skills and thus find themselves unemployed.

In 1965 the unemployment rate had dropped to 4.6 per cent of the 75,635,000 in the labor force. But 1,431,000 of these 3,456,000 unemployed were between the ages of sixteen and twenty-four, which is 10.1 per cent of the 14,168,000 youth in this age group in the labor force. And for the youth between the ages of sixteen and nineteen the unemployment is 14.8 per cent. The women fare worse than the men. In

the total labor force 4.0 per cent of the 49,014,000 men are unemployed, but 5.5 per cent of the 26,621,000 women cannot find jobs. In the fourteen to nineteen age group, 13.1 per cent of the 4,157,000 boys were unemployed. The situation for the non-white is much worse. Four and one-tenth per cent of the 67,187,000 whites in the labor force were unemployed as compared to 8.3 per cent of the 8,448,000 non-whites. In the fourteen to nineteen age group 11.8 per cent of the 3,668,000 white males and 12.6 per cent of the 2,649,000 white females were unemployed as compared to 22.6 per cent of the 489,000 non-white males and 29.8 per cent of the 285,000 non-white females.¹

This means that over one and a half million young people (fourteen to twenty-four) in the country are looking for work and cannot find it. And the number of young people entering the labor force is steadily increasing. In 1965 alone, 550,000 young people entered the labor force, and there are expected to be over twenty million young people in the labor force in 1970 compared to approximately seventeen million now.² And there are 13,029,000 young people now not even officially in the labor force, many of whom, especially the 10,506,000 women, might be interested in work if they could find it.

For these young people to find careers it is essential that they be adequately trained in the skills that will be demanded in the future. The unskilled and the dropout will be virtually unable to remain steadily employed as increasing and changing technological developments create demands for new skills and as the structure of the economy changes so that traditional occupations become obsolete.

The economy has changed from an agricultural to an industrial and commercial one and from chiefly goods-producing to a service-producing one, and the vocational opportunities have changed accordingly. Today opportunities in such fields as agriculture and mining are declining or increasing at a rate below that of the economy, and the need for unskilled workers is decreasing. However, the expansion of research and development, the application of new technology, the increased size and complexity of business organizations, the growth of record keeping and the increased need for educational and medical services have created many new opportunities in these areas for youth with the appropriate skills.

The greatest expansion has been and will continue to be in professional and technical fields, especially in the rapidly-growing areas of social science, education and medical services. There will be increasing job opportunities in engineering and science, especially the new fields of space, atomic energy, and automation; social work; library work; personnel work; and data processing and electronics. There will

¹Report on Manpower Requirements, Resources, Utilization and Training, U. S. Department of Labor (March, 1966).

²Ibid.

be many openings for women in all these areas, especially in education, medical services, social science and data processing.

Increasing almost as fast is the need for clerical and sales workers. Such occupations as secretaries, bookkeepers and accounting clerks, data processors and those in public contacts will have a great demand for workers, many of whom will be women. Sales occupations will increase their demand for part-time workers, which also can be filled by women.

There will also be a greatly increased demand for service workers, although the need will vary within the field. The need will be greatest in food services, protective services, recreational services, personal services, beauty services, cleaning services, hospital work, maintenance, business services, and services in air transportation. Many women will be employed in these fields.

Demand will also increase for skilled workers, especially for mechanics, repairmen, electricians, craftsmen and skilled building-trades workers.

Most of these occupations which will be in great demand in the future are being taught at the present time either in public or private institutions, although not on the scale which their future needs would seem to demand. Other occupations in these fields, however, are not being taught and hardly even exist at the present time, but will be important in the future. Important among these are new non-professional jobs in health, welfare and educational services.

These positions are especially appropriate for the large numbers of currently unemployed youth and for Job Corps enrollees. They do not require the extensive and long-term training that many of the other vocations in great demand require, and thus unskilled youth can readily be trained and provided with work. Yet these are not unskilled positions. They are rather entry positions into fields where experience and further education can lead to professional or non-professional careers. And rather than being meaningless and unnecessary work, they serve important functions and relieve the professionals of unrelated tasks. In many of these jobs, non-professionals from disadvantaged backgrounds can add a new dimension of service as they can more easily understand the problems and relate to people of their own background who are being served than can the professionals.

In the rapidly expanding field of education, there is a need for such positions as teacher aides, library aides, school-community workers, recreation aides, talent searchers and home visitors. Many of the functions of these positions are not being fulfilled at the present time, but are important and necessary.

Similarly, there are many opportunities in the field of health. Aides are needed for nurses, community health, home care, health education, testing, rehabilitation and many other areas. Health case aides, case managers, data clerks, companions, psychiatric aides, and community mental health aides are needed also.

Non-professional aides could also be valuable in community organization and housing programs as organizers, interviewers, visiting homemakers, family counselors, neighborhood coordinators, big brothers, and mother's helpers.

Positions similar to these can also be used in such fields as corrections, mental retardation, social work, child care, recreation, legal services and police work.

There are also potential opportunities for non-professionals in the rapidly expanding field of research, in such areas as interviewing, coding, data processing, operations accounting, statistical analysis, organizing studies and disseminating results. Workers from underprivileged backgrounds can be especially useful in interviewing their peers and are often able to elicit information that professionals could not.

In training unskilled workers, most program directors have found that actual work experience is essential but that it must be supplemented by various supportive services.* Observation of the work situation and simulated work experience at several assignments have been found useful in prevocational training. The trainee can be taught by experienced workmen in a simulated work situation with visible accomplishments while under supervision. On-the-job training in an actual employment situation but training under close supervision has been found increasingly useful. Often if a trainee is not yet ready for regular employment, he is employed at the place of training.

In addition to work experience, many program directors have found that basic education is necessary. This is most successful if the skills taught are those necessary for the trainee's vocation and if they are closely related to his vocational training. Counseling, testing and close supervision have been found necessary at all stages of training. This is an important part of the program in Job Corps. In addition vocational orientation is usually necessary. This includes training in work skills and habits, proper appearance, relations with others, proper behavior on the job, and personal adjustment to employment. It is also necessary that the trainee understand such matters as payrolls and taxes, and applying and interviewing for a job. Orientation to the place of work and the functions of the employees is also important.

New curriculum guides including programmed and audio visual materials are being used in vocational training. Several new techniques are also being tried, including using more experienced trainees to help newcomers and training students in groups to give them a sense of solidarity. Role playing, group discussions, staff meetings and seminars, and student reports have also been found useful especially when the job involves working with people.

*Many training program directors have found it advisable to teach skills on several levels, so that the trainee may advance as far as he can be trained for several different jobs or can finish earlier.

MULTIPLE ROLES OF TEACHER-COORDINATOR

K. Otto Logan

In the subject assigned to me, I am interpreting "multiple roles" as meaning "many duties and responsibilities," and I am assuming that everyone understands that "teacher-coordinator" refers specifically to teachers in vocational cooperative programs whose main responsibility is divided between the classroom and coordinating the instruction with on-the-job requirements and student needs.

What I'd like to do here is to show from my experience in Distributive Education what it is that puts the teacher-coordinator in a unique position. I would like to stress the necessity of recognition by school administrators of these special requirements. Here are a few points to consider:

The success of any class depends largely on the teacher. In an elective course, such as in a cooperative program, the quality of teaching can mean the life or death of the program itself. In a college-required, academic course, the student has no choice but to attend classes, even if the teacher might be sarcastic, arbitrary, or unfair. A poorly equipped or inept D. E. teacher, on the other hand, would be left without a class and perhaps without a job if he lacked the ability and qualifications to make his classes instructive, interesting, and productive--so the whole program might fall by the wayside. I've seen this happen.

Most states require, for certification, that a D. E. coordinator have, in addition to a degree, a minimum of two years' practical experience in a distributive occupation. (This may vary, up or down, in various states.) The theory behind this requirement or standard is simply this: A teacher-coordinator will be far better prepared to present his instruction if he speaks from a background of experience in his field. This experience lends something in terms of respect and acceptance not ordinarily derived from book learning alone. Businessmen in a community quickly find a common ground of understanding and communication and as a consequence, readily cooperate fully with the aims of the distributive education program. Students, also, quickly recognize and respect an instructor who speaks with the authority of practical experience. Administrators must acknowledge the value of occupational experience and its importance for the success of a cooperative program.

Many elective courses are self-explanatory by their titles, or are well known as to content (such as Art, Music, Chemistry) but this is not so in Distributive Education. For example, what do students know about Distributive Education? Do they understand what content is covered in Distribution? Do they understand that it is a program rather than a class, aimed primarily toward occupational objectives? Do they understand that they will attend school part-time and work part-time on a job? Do they understand that the job or career training must be in their program area? Do they know that students are paid on the job; that school credit is given for the course, etc.? It is the teacher-coordinator's responsibility to make this information known--to students,

to the parents, to the businessmen, to the public--and probably most of all to school counselors, teachers and administrators. Coordinators have devised many methods--brochures, newspaper publicity, student youth clubs, D. E. store display windows, letters to parents--many clever devices to accomplish this.

Thus you see that a teacher-coordinator has the role of a publicity agent. And what's more, it must be a continuous process. Otherwise there may be no students or no positions to place them in. I can vouch for the fact that where even experienced coordinators have let down on publicity, it has had a direct, adverse effect on student enrollment. (One center dropped from two programs to one simply because it was assumed that everyone knew of the program.)

A D. E. coordinator has more contact with a community than perhaps any other teacher in the school program. Most administrators who employ teacher-coordinators recognize that whoever is chosen to serve in this capacity is in a public relations position; he is the liaison between the business community and the school. What he says, what he does, and the way he says and does it, creates for the businessmen an image of the school--good or bad.

Most programs, when properly set up, have a minimum of one or two class periods scheduled daily for downtown coordination. What does a coordinator do during these periods scheduled for coordination? Briefly, the coordinator checks with employers on the students' strengths, weaknesses, the job requirements, and he adapts his course instruction to meet the immediate needs of his students and the jobs they hold. He investigates training stations to make sure that they are respectable places of business and able to provide the proper conditions for a student to learn on the job. A good teacher-coordinator discovers early that unless he has full knowledge of a store's policy and operation, he should go directly to the manager to discuss the D. E. program. A manager must be fully advised of the aims and purposes of the program and should understand that he has a vital part in the training of the student. Management may arrange for the coordinator to work through a department head or through someone especially assigned as sponsor. However, coordinators of new programs should not make the mistake of trying to set up relationships through buyers or department heads, or anyone else, before first having contacted the top man. Experienced coordinators have found that the top man, even the busiest man, is most often the easiest person to do business with in matters of this sort.

Several visits should be scheduled to each establishment, but at least one a quarter. (In some cases, especially in problem cases, several visits may be necessary during a quarter.) Decisions must be made regarding employers' reports and whether a student should be rotated in several departments or should concentrate in one special area. Student interests and aptitudes must also be considered. The coordinator, therefore, is in the role of an instructor, guidance director, counselor, and advisor.

When an administrator is made aware of all these facets of a teacher-coordinator's duties, he must acknowledge that a coordinator has a real

job! Does the regular co-worker in academic subjects know this? Does he look upon the one- or two-hour downtown coordination periods as a time to drink coffee, to shop, or to get out of the school building? You'd be surprised at the number of coordinators who get "barbs" from other teachers on an out-of-class period: "You've sure got it soft" is a tiresomely familiar statement. Actually, it is much easier for a teacher to have twenty-five students in a regular classroom than in a science laboratory, for example, and, further, a D. E. class is even more complex than a science lab because most of the twenty-five students have separate labs in twenty-five different businesses. Administrators must be made aware of this, and where new programs are initiated, it is most advisable that the superintendent or principal be fully advised (perhaps at a faculty meeting) of the multiple roles of a teacher-coordinator, and of the full and complete justification for coordination on school time. It will make it much easier for the teacher-coordinator to work in harmony with his co-workers in a difficult (but exciting) program. Experienced coordinators occasionally find faculty colleagues who are still not convinced, in which case all a coordinator has to do is to invite the skeptic to accompany him on one of his coordination trips. This generally ends the matter.

Let's give a little attention for a moment to the title "coordinator." At one time this title applied almost exclusively to the Distributive Education cooperative program. It meant primarily coordinating the instruction with on-the-job requirements in line with student needs. Today everybody wants to get into the act. We have Coordinators of Federal Programs, Coordinators of Youth Corps, Coordinators of Adult Education Programs, Coordinators of Student Activities, and so on. Note that "coordinator" in these positions does not have the same basic definition as would apply to the duties of a teacher-coordinator in a cooperative program. In a cooperative program the teacher of the subject matter is expected to do the coordinating. The heart and worth of the program would be lost if one person were expected to do the teaching and another do the coordination. Should administrators make the mistake of assigning anyone except the teacher as a coordinator, the true meaning of coordination would be lost. The understanding of student needs, his problems in relation to the job requirements, is, I repeat, the heart of the program. The teacher must do the coordinating for his own students if the program is expected to move forward.

Perhaps one of the most necessary and important duties of a D. E. coordinator is the organization of and the work with a representative Advisory Committee. The Committee, when composed of employers and employees, is a coordinator's strongest support. Regular meetings must be held at least three times a year. When committees are organized and conducted properly, the businessman becomes a partner in the training of students. You might be surprised to learn that the average businessman desires greatly to carry out his part of the program. I know of one employer who has served on an Advisory Committee and has hired D. E. students for the past eight years, and takes pride in his part in the training of these students. He has a complete record of their progress in the field and reports frequently on the satisfaction he has received in being an active member of the D. E. program. Remember this: if you have any problems in the D. E. Cooperative Program, your Advisory Committee will

almost invariably come to your rescue. I can cite instance after instance where programs have been dropped because a coordinator has not availed himself of or used the services and advice of Advisory Committees.

Cooperative programs involving study in school and work on the job have become most popular in the last few years. It is interesting to note that D. E. has pioneered in this field, largely because preparatory programs were not possible under the George-Dean and George-Barden Acts. Even now, through the 1963 Vocational Act, where preparatory programs are possible with Federal funds, we have found in the State of Washington that school districts, even the very smallest, prefer or ask for the cooperative type of education, even though it may be difficult to administer in their small communities. All about us we find that cooperative programs are now the topic of conversation in many of the other vocational services. In the State of Washington we have a high school D. E. cooperative program and a mid-management cooperative type of program at the post-secondary level. It is my opinion that although methods of coordination may vary in the different services in respect to operation, essentially the same meaning attaches to the title of "coordinator."

All coordinators, in the future, must recognize the need for close cooperation between services. When an occupation requires the knowledge and competencies of more than one service, the question quickly arises, "How can this be done in a cooperative program?" How should this be done in terms of occupations which are distributive in nature but which have an agricultural background? How should this be handled for occupations involving both home economics and distribution? So, along with the multiple duties of the coordinator, this new dimension with its attendant problems has been added. I am confident that the problem will be faced squarely and that this challenge facing coordinators will be met.

In a survey I made in the State of Utah recently, I found that what coordinators liked most about the cooperative program is its uniqueness. It presents an opportunity to work closely with downtown businessmen. It offers a good combination of theory and practice, and the possibilities for expansion are now tremendous. This is the kind of spirit and enthusiasm that you will find in almost every successful cooperative program.

The coordinator's duties are multiple; his duties are demanding; and, it is my first belief that this type of education is the very best a student could secure.

I will speak anywhere and any time on the value of the cooperative program.

Duties and Responsibilities of the Teacher-Coordinator*

1. To students

- a. Teach thoroughly the knowledges and skills necessary for success in the field of distribution, using all approved methods of instruction.
- b. Explain purposes and procedures of part-time Distributive Education program.
- c. Give essential information about occupations.
- d. Know that student is sincere and really wants to follow occupation as a career.
- e. Assist in arranging schedule of general courses.
- f. Provide a training plan for each student as an individual and be sure the student understands it.
- g. See to it that adequate facilities and instructional materials are accessible to students.
- h. Provide properly selected related and technical instructional material.
- i. Provide working conditions in the classroom which are conducive to efficient and effective study.
- j. Establish progress and permanent record system.
- k. Establish effective placement and follow-up plan.
- l. Keep informed about the students' economic, social, and scholastic backgrounds.
- m. Develop or secure an analysis of each student's occupation for purposes of making a schedule of processes to be learned on each job.
- n. Make proper placement and supervise students while in training.
- o. Prevent exploitation of students on the job and in school.
- p. Build and maintain student morale and proper cooperative attitude.

2. To employers

- a. Carry out a systematic plan of coordination.
- b. Make clear the working of the plan of part-time Distributive Education.
- c. Make clear the purpose of training.
- d. See that placement is justified.
- e. Develop a thorough understanding of training plan.
- f. Make careful selection of students.
- g. See that students are taught, correctly, the proper related subjects.
- h. Adjust all complaints properly and promptly.

* Distributive Education, Coordinators Guide, State Board for Vocational Education, pp. 25-29.

- i. Transfer or remove "misfits."
- j. Fill vacancies promptly, replace with juniors (future DE) if necessary.
- k. Avoid wasting the time of employer and employee unnecessarily.
- l. Avoid having red tape in dealing with employers.
- m. Never try to run the employer's business.
- n. See that student has proper attitude toward job and employer.

3. To school officials

a. Administrators

- (1) Keep permanent records.
- (2) Prepare yearly plan.
- (3) Prepare yearly budget.
- (4) Work out plan and policy for granting credits.
- (5) Show need for providing instructional materials, equipment and classroom.
- (6) Keep out unnecessary regulations.
- (7) Have complete knowledge of all phases of the program.

b. Faculty members

- (1) Follow proper lines of authority in all matters in which teachers and principals are concerned.
- (2) Develop clear understanding of the purpose and plan of program.
- (3) Establish and maintain cooperative working conditions.
- (4) Enforce disciplinary regulations of students' academic studies.
- (5) Assist in working out schedules.
- (6) Seek aid of teachers in personal analysis of students.
- (7) Make available all necessary records.
- (8) Seek aid in working out related subjects.
- (9) Recognize that teachers also have problems.
- (10) Make a clear understanding of your job and of your training and experience and education.

4. To parents

- a. Maintain cooperative relation with parents.
- b. Furnish adequate program information.
- c. Stress the advisability of students completing the entire course.
- d. Develop student expense sheet as means of keeping parents informed.
- e. Show expenses have been kept as low as advisable.
- f. Keep parents informed of changing social and economic conditions related to the occupation in which each student is being trained.
- g. Avoid assuming prerogative of parent in making final decisions.
- h. Justify placement, adjustment, or transfer of student.

5. To community organizations

a. Sell the Distributive Education program

- (1) Stress the need for the program.
- (2) Give advantages of the program to those directly concerned.
- (3) Make clear objectives of the program to those directly concerned.
- (4) Make known the requirements of the reimbursable program.

b. Secure the acceptance of organizations

- (1) Lions, Kiwanis, Rotary, and other service organizations.
- (2) Fraternal organizations
- (3) Junior and Senior Chambers of Commerce
- (4) Church of your choice
- (5) Various local unions

c. Set up an advisory group

- (1) The group preferably selected by the businessmen and employee organizations themselves.
- (2) The coordinator could serve as secretary and as an ex officio member but in no way as a voting member.
- (3) Membership appointed on a staggered system.

d. Exercise leadership in education for distribution

- (1) Help the community organizations to extend and carry out their own educational programs.
- (2) Get the organizations to establish needed clinics, workshops, in special areas as need might require.

6. To other coordinators

- a. Offer your services as freely as possible to the other coordinators in your area (especially the new teachers).
- b. Share ideas, discuss differences of systems.
- c. Discuss new methods and teaching techniques.
- d. Inspect and examine new training aids as a group.
- e. Keep others informed as to current events in the field.

7. To the profession

- a. Become a member of all the necessary professional organizations.
- b. Keep your dues paid.
- c. Attend meetings of local, county, and State educational groups. In DE you, as a coordinator, should attend at least one meeting per month. No meeting, no interest. Inactivity breeds discontent.
- d. Maintain high standards and keep the profession an honorable one.
- e. Work with teachers in related areas to improve the program. Exchange classes with other teachers during the year in order to improve the instruction in the distributive field.

- f. Work within school requirements and within the terms of your written and implied contract.
- g. Conduct research in areas pertaining to Distributive Education.

8. To the State Office

- a. Hand in all required forms on time.
- b. Attend all meetings called for.
- c. Keep certification up-to-date--State and local--where necessary.
- d. Keep files and records up-to-date.
- e. See that the State Office knows about anything that is new, unusual, timely, for the benefit of the DE programs, regardless of who gets the credit.

9. To the public

- a. Try to give a clear understanding of objectives of program.
- b. Develop essential working attitudes of all public agencies.
- c. Develop and maintain active public support.
- d. Keep public informed on progress of program.
- e. Assemble and keep accurate data on program.
- f. Show that adequate training opportunities have been provided at reasonable cost.
- g. Keep informed as to changing business and industrial trends.
- h. Avoid stirring up needless unpleasant situations.

10. Additional duties

- a. Plan your program in advance, by dates, in detail. Make it reasonable and workable, then follow it.
- b. Buy or supervise the acquiring of classroom supplies. In DE, many of the items you will need cannot be found through the regular channels.
- c. Interview and screen students before school starts. Help them secure training stations before school starts and after school is out in the spring.
- d. Make a job analysis for each of the training stations you will have or expect to have.
- e. Compile specific merchandise and training instructional materials for each training station.
- f. Keep records up-to-date, complete and accurate.
- g. Arrange for the follow-up of students. Arrange annual get-together, if possible, for alumni.
- h. "Short course" work could be offered to summer students.
- i. Build your classroom files; put your classroom in readiness for your program--storage, etc.
- j. Develop projected plans, with interested groups, concerning program of work for adult classes and submit to local administration and State Office. (At least one new adult program should be instituted each semester, continuing programs already initiated.)

- k. Prepare and distribute newspaper and radio releases concerning program.

- (1) Restatement of objectives
- (2) Number of high school classes
- (3) Number of students in program
- (4) Number of students placed
- (5) Training stations cooperating in program
- (6) The DE club program and its projected program of activities.

- l. Attend teacher-training conferences sponsored by the State Board for Vocational Education.

11. Related responsibilities

- a. Become a dedicated counselor and friend to DE students.
- b. See that proper information is always in the hands of the right people at the right time--good public relations.
- c. Set up the DECA club program in school.
- d. Assist in a State organization of DECA.
- e. Handle the awarding of certificates and other honors at the completion of the program.
- f. Visit homes when possible. Open-house parties have been successful in certain areas. Potluck dinners and other get-togethers should be encouraged between students, families of students and possibly employers.
- g. Work as a liasion between school, business, home and public.
- h. Develop a file on both the student and the training station. List the important characteristics of each.
- i. Supervise the teaching of the related areas in DE.
- j. Work with the local or regional Employment Security office.
- k. Organize annual class reunions as a means of follow-up.

ESTABLISHMENT, ORGANIZATION, AND OPERATION OF COOPERATIVE EDUCATION

Robert M. Worthington

Cooperative education, a program that combines classroom work and practical industrial and business work experience, is a unique bridge for the gap between school and the world of work. Cooperative education can be immediately responsive to changes in our technological society. Cooperative education in the United States has been demonstrated to be effective at many levels. It, of course, began at the college level for engineering students. There is no doubt that well-conceived and organized cooperative education programs can be effective for students at all levels--in the high school, the technical institute and community college, teacher education institutions, and even graduate schools.

Cooperative vocational education, particularly for high school students, should not be looked upon as a poor substitute for full-time institutional preparatory programs but as another equally important avenue for helping young people get and hold their first job. Inability to obtain and hold a job is a severe blow to any person, young or old. Cooperative vocational education programs emphasize the school's willingness to help young people make the often difficult transition from school to work.

Some of the most important outcomes of cooperative education programs for youth are that they provide entry level work skills which are marketable; provide an opportunity to earn money while at the same time perform useful work; and develop an improved self. They also provide invaluable occupational information and guidance which is realistic and can be very difficult, if not impossible, to attain in other ways. They give students a realistic opportunity to develop proper work habits and attitudes and to learn to get along with people outside the school situation.

For the purpose of this discussion my comments are directed to the objectives for which this seminar was organized: "to prepare guidelines for encouraging, developing, improving, and expanding cooperative education programs for high school youth and post-high school youth." To establish a framework for our discussion on the establishment, organization, and operation of cooperative education, I will discuss cooperative vocational education as it is developing in the highly industrialized State of New Jersey and set forth specific suggestions which may be applicable to any locality.

The passage of the Vocational Education Act of 1963 provided the impetus in the State of New Jersey for a state-wide study by a blue-ribbon committee of business and industrial leaders to provide guidelines for action for New Jersey's vocational education needs. The report of the New Jersey committee entitled "Vocational Education for New Jersey Today" strongly recommended that a massive effort be made to expand vocational education at all levels. It urged the establishment of cooperative work experience programs in every high school in the state, but especially urged that the small high school use this avenue for entry into the labor force where little, if any, formal vocational preparatory

opportunities were available. Using the recommendations of this committee report as our guideline for action, the Division of Vocational Education began immediately to place a maximum effort on the promotion, establishment, and organization of all kinds of cooperative education programs. A review of programs in existence in the State of New Jersey prior to the passage of the Vocational Education Act of 1963 revealed that the state had only three cooperative trade and industrial education programs, thirty-four distributive education programs, and twenty-five cooperative office occupations programs.

Goals for Program Expansion

Based on population trends and studies of labor market needs, the Division, with the help of the State Vocational Advisory Council, established state-wide goals for the various cooperative education programs. In order to provide adequate leadership at the state level, a special branch was established for cooperative industrial education programs with a director and three staff members whose sole job was to promote and establish programs in this field. The director of Cooperative Industrial Education was also named as chairman of the Division-wide Cooperative Education Committee. Working with him on the Cooperative Education Committee were the State Directors of Distributive Education, Home Economics Education, Agricultural Education, and Business and Office Occupations. With coordinated effort at the state level, goals were established using the 1964-65 school year as the starting point and the 1968-69 school year as the target date. Our state-wide objective is to expand Cooperative Distributive Education from thirty-four programs in 1964 to one hundred fifty in 1968; to expand Cooperative Office Occupations from twenty-five programs in 1964 to two hundred in 1968; to expand Cooperative Industrial Education from three programs in 1964 to one hundred fifty in 1968. We are moving rapidly towards reaching these goals which would give us a total of five hundred Cooperative Vocational Education Programs in 1968 at the secondary school level. Let us examine briefly program by program what we are doing in the State of New Jersey to accomplish these ambitious goals.

Cooperative Distributive Education

Our State Distributive Education staff makes its services available to school administrators and interested community groups who wish information on the establishing of D. E. programs based on the results of our periodic county and labor market surveys which detail the employment picture in kinds of training needed within the labor market's business community. When the individual community commits its resources to the establishment of Cooperative Education, a local analysis of training stations is conducted to determine where students might best be placed. Other vital planning data are compiled such as possible hours of training, the amount of remuneration, and the diversity of training stations for students with various occupational goals. If the results of this local survey are favorable, the school board approves the program as an addition to the curriculum. The designated coordinator, in close cooperation with the State Distributive Education staff, develops a program

of instruction to meet both the local needs of students to be enrolled in the program and the needs of the local business community. A list of quality Distributive Education programs that are in operation is provided to administrators who wish to observe and study them. The total process of surveying the local community and labor market area, establishing a curriculum, establishing an advisory committee, and preparing a fully-equipped sales laboratory and classroom, generally takes three months to a year prior to the installation of the instructional program. However, in the summer of 1965 we were able, in our State, with a crash effort, to establish fifteen new programs and get them in operation between July 1 and September 1. In our larger cities we recommend city-wide coordination of Distributive Education programs rather than each high school's attempting to operate on its own. Our state and local advisory committees in this field favor the establishment of the policy that students are employed throughout the school year on a half-day school and half-day work basis. This schedule permits the employer to have the same student throughout the year, and at the same time provides rotation of jobs according to a job process schedule. This schedule can be developed only when a business sponsor is fully committed to the program.

Our State Distributive Education service is frequently called upon to assist in recruiting, screening, and evaluating possible candidates and their credentials which are submitted to them through local school districts or the county superintendent's office. In a rapidly expanding program such as this, we are liberalizing our certification standards while at the same time working for high quality personnel who may or may not meet every requirement. We are finding it increasingly necessary to issue sub-standard emergency certificates for coordinators in this field. We, however, expect to meet the personnel shortage with four newly established teacher training programs, two in State colleges, one in a private college, and one at our State University. We conduct state-wide in-service training conferences two times each school year for all the distributive education coordinators.

Cooperative Industrial Education

Cooperative Industrial Education has expanded in New Jersey from four programs in 1964 to one hundred twenty which will be in operation in September, 1966. Under our old Cooperative Trade and Industrial Education plan, program and certification standards were quite narrow and rigid, and, as a result, growth was inhibited. By broadening the program and liberalizing certification standards for training coordinators in several institutions, rapid expansion is now possible. Recent action by our State Board of Education has broadened the scope of Cooperative Industrial Education by establishment of three levels: Cooperative Trade Occupations for the more highly skilled occupations, Cooperative Industrial Occupations for the semi-skilled or single skilled occupations, and Cooperative Employment Orientation in service occupations for the mentally retarded or extremely slow learners. Student learners are now employed in one hundred fifty different classifications of industrial jobs in more than thirteen hundred state approved work stations. Industrial employers are clamoring for more student learners. Of course we can

attribute some of the success of our program to present favorable economic conditions and the manpower shortage. Nevertheless, we feel that this expansion could not have been accomplished without providing adequate leadership and flexibility at the state and local level.

In establishing Cooperative Industrial Education, some of the following factors have been most significant for us. We have published and distributed widely a guide for part-time cooperative education, plus three pamphlets describing program operation. We have worked hard to develop cooperation between outside agencies whose influence affects the success of the program. Good working relationships have been established with the State Department of Labor and Industry, the Federal Wage and Hour Bureau, and the Rehabilitation Commission, and labor organizations. We have also developed much closer working relationships with the Secondary Division of the Department of Education. Our State staff has made themselves available at any time to speak at meetings of local school personnel. Preferential reimbursement has been most valuable as a stimulant to programs. Some of our new programs have been funded one hundred per cent the first year of operation as pilot programs. Paper work for establishment of programs has been kept to a minimum. Routine details for gaining state board approval have been made simple and understandable. Of course, as I mentioned previously, certification has been revised to be more realistic in terms of supply of personnel to man the programs. In-service courses have been conducted throughout the state by our State staff and a new training course for coordinators has been established at two colleges and at the State University.

Cooperative industrial education is being utilized in three teacher education programs in New Jersey. The State University has developed a five-year program to provide the equivalent of five thousand clock hours of industrial experience. Two state colleges have begun supplementing shop and laboratory experiences with cooperative industrial experience in three-month summer blocks. Another interesting development is a suggested plan from the National Commission for Cooperative Education to establish cooperative programs in our developing community college system. Two county technical institutes operate cooperative programs in Automotive, Drafting, and Electronics Technology. A special cooperative program for school dropouts is operated in cooperation with the city of Newark and seven major corporations. Students go to school one week and work the next week.

Cooperative Office and Business Education

Cooperative education is rapidly becoming a pattern of training in the field of business education. The program of cooperative work experience in office occupations has long been practiced in a limited number of high schools of New Jersey. It has the greatest potential for growth of all programs. Every high school could support a cooperative program in this field.

Cooperative office and business education has taken many patterns. Two types are most common. The first is a program in which the student is engaged in practical work experience on a job in which he may use

the skill learned in the classroom, but this practical experience is not provided concurrently with a job related class in the school facility. In many instances, such programs lack a very essential feature of instructor coordination. They represent, more than anything else, an answer to an economic demand rather than good cooperative education.

The second, and much more desirable, is a program in which the student is engaged in cooperative work experience at an approved training station. A job related course is provided in the school facility, and this course as well as the coordination of the school and practical experiences is under the supervision of a vocationally competent teacher-coordinator. The teacher-coordinator works closely with the training station supervisor and employer in mapping a program which will best utilize the students' skills and the instruction being received in the classroom.

Because of the variety of locally developed programs, cooperative office education has been organized in many ways.

1. The all-year program with students in school during morning hours receiving basic education and job related course instruction, and working at training stations utilizing knowledges and skills acquired for three or four hours daily.
2. Two students may fill a single job with one working during the morning session, and the second working during the afternoon session.
3. Students may participate in the cooperative experience for only one semester during their senior year in high school (usually February to June).
4. Students may alternate work with school attendance; in school one week--working the next week.
5. Students may work for only a short span of time, e.g., a two-week to six-week period.

The latter three programs do not represent, in our opinion, an ideal cooperative occupational education model.

Cooperative work experience programs have involved secretarial trainees in greatest numbers, but many of them have been extended to the general clerical and bookkeeping areas. One cooperative program in electronic data processing is in operation with twenty-six additional high schools scheduled to enter this field in September.

Cooperative Home Economics Education

This field is undergoing a transition to place emphasis on marketable skills. Cooperative education will be an important part of this transition. There are few, if any, cooperative programs in this field comparable to the older established programs; however, in four New Jersey

communities some part-time work experiences have been included in the home economics occupations courses. Where there are cooperative industrial education and distributive education coordinators, home economics teachers and these coordinators have worked together in identifying places of work and in supervision of students.

With the increase of home economics occupations courses as part of a comprehensive home economics program in our secondary schools, there will be a great need within the next two to three years for teachers who are prepared to coordinate cooperative education programs in diversified home economics occupations. (i.e., clothing services, foods services, child care services, hospitality industry services, etc.)

Schools with home economics occupations courses are finding in their first year of experience that there might be value to student preparing for entry occupations if the following approach were utilized:

- a. Develop pertinent attitudes, information, and competences in a specific occupational course at the eleventh grade level. Provide field trips and some participation in a work experience as part of this course.
- b. At the twelfth grade level, provide a bona fide cooperative education program for students in home economics occupations.

To lay the groundwork for future cooperative home economics programs some successful techniques being used this year include:

1. Students are placed for blocks of days or weeks in clothing retail shops where they assist with alterations, selling, display, and wardrobe coordination advice.
2. Students are placed in after-school and week-end jobs in nursing homes, diners, restaurants, coffee shops, and fountains.
3. Groups within classes create temporary business ventures, sometimes with the advice of the advisory committee representing some of these businesses. Some enterprises were: snack shops for students and teachers, catering services for PTA groups and student organizations, tea room service for faculty, dressmaking shop, drapery and slip-cover making clinic.
4. Experiences in catering and quantity cooking are provided through school lunch services (paid and unpaid).

Future plans of our leadership staff in this field include:

1. Develop with the help of an advisory group a proposal for a cooperative education program in home economics occupations for presentation to State Board for Vocational Education.

2. Encourage local administrators to extend home economics staffs to include a member who will coordinate cooperative home economics occupations activities.
3. Develop college programs to qualify home economics teachers for responsibilities in cooperative education. The first and most fruitful attack would be through graduate and in-service courses.

General Administrative Considerations

No doubt the greatest strength of cooperative education lies in its flexibility in method of operation. The concept of combining work experience and formal schooling can be developed in many ways. Administrators at all levels must remind themselves that the needs of the students to be served must come first. Schedules and programs should be designed to fit the needs of a particular community or labor market area only after thorough consideration of student needs.

No amount of administrative strategy can replace the most important individual in administration of cooperative education--the program coordinator! The interdependence of school and industry requires coordination by a person who is enthusiastic, tactful, and perceptive. The coordinator must be able to work with people of all levels and to share his own enthusiasm with them. He must be able to promote and to sell ideas. Once the right coordinator is selected to establish a program, we believe that he must be ready and able to carry out the following practices successfully:

1. Develop a spirit of cooperation among faculty, students, and administrators.
2. Become integrally involved with the total school program.
3. Maintain a written account of the progress shown by his students and the program in general.
4. Maintain constant communication with school administration.
5. Cooperatively select training agencies for the students with parents' knowledge, consent, and cooperation.
6. Utilize results of standardized tests to determine the student potential.
7. Make a survey of the student body to ascertain the nature of his future student learners.
8. Place students in training agencies only if they meet prescribed criteria.
9. Initially contact potential employers.

10. Confer with guidance counselors and other faculty members in the selection process and determine the over-all progress of his trainees.
11. Conduct an occupational survey of the community served by the school district and revise it periodically to keep it up-to-date.
12. Organize an advisory committee from business and industry to keep them informed of the progress of his program and to keep them vitally interested in the cooperative program.
13. Make arrangements for the related information classes to be given by him or supervised by him (depending on the size of the program).
14. Keep abreast of all changes in local, state, and national labor and employment laws.
15. Arrange for suitable wages, working conditions, and work schedule with the employer.
16. Aid the employer in making an analysis of jobs that the student-learner will be involved in so that progress may be recorded in some standard manner.
17. Make supervisory visits to the student on the job.
18. Become involved with the student's welfare on the job and prevent the exploitation of the student by constant reference to the mutually-agreed-upon training agreement.
19. Study the community on a periodic basis to determine new fields of opportunity for utilization by the program.
20. Create a cooperative atmosphere between the parents, students, employers, and school officials.
21. Offer educational, vocational, and personal guidance to his students.
22. Develop a strong on-going program of public relations.
23. Maintain a follow-up program of the students in the high school program for a period of time after their graduation.

Factors Affecting the Success of Cooperative Vocational Education

At the State level, awareness of the many factors which affect the success of Cooperative Education and the taking of positive action can insure growth and acceptance of the program. The following are some of the factors we believe to be essential:

1. Information must be provided through every possible means to schools and industry on program operation and goals. We have, in our State, distributed hundreds of copies of "A Guide for Part-Time Cooperative Education Programs." We are constantly developing, revising, and distributing three pamphlets which describe the several kinds of programs. School administrators, guidance personnel, board members, and lay leaders need to be thoroughly familiarized with and sold on cooperative education.
2. There must be cooperation between outside agencies whose influence affects the success of the program. Good working relationships must be established and maintained with many agencies such as the State Department of Labor, the Federal Wage and Hour Bureau, the Rehabilitation Commission, and organized labor.
3. There must be cooperation between other divisions within the State Department of Education.
4. State staff people must be available to speak at meetings of local school people at their convenience.
5. Preferential reimbursement or outright grants can be most valuable as "pump primers" to get new programs started.
6. The routine details of gaining State Board approval of a local district program must be made more simple, understandable, and expeditious.
7. Certification standards must be liberalized so that requirements are realistic and do not serve as a deterrent to establishing new programs.
8. In-service courses must be provided in strategically located centers so that coordinators may more conveniently attain full certification and keep up with new developments in the field.
9. There must be an understanding and cooperation among coordinators and supervisors of all vocational cooperative programs such as Distributive Education and Office of Industrial Education, particularly with regard to the problems of the smaller high schools in connection with limited work stations and occupations which cut across two or more fields of vocational education.

10. Willingness to innovate should be a keynote at the State level. We have been experimenting with new cooperative programs for such disadvantaged groups as the mentally handicapped and over-age students at the junior high school level. Such program diversification must be accomplished without lowering standards.
11. Help from the State staff must be readily available to new coordinators who need and deserve it.
12. Every effort must be made to protect the interests of the employer who provides experience, instruction, facilities, and pay without cost to the taxpayer.
13. The help and cooperation of organized labor is essential.
14. State laws must be closely observed to enable the program to run smoothly, particularly in regard to hazardous occupations and food service establishments where alcoholic beverage control laws are in effect.
15. Violation of Child Labor Laws should be avoided through communication and state-wide inspection.
16. The challenge of competing programs of other agencies must be accepted and met positively through building superior quality into the public school system.
17. Special help should be provided by the State staff to encourage local districts to develop better related classes so that the in-school activity is challenging and of value. Cooperative education should never be thought of as simply putting a student to work.
18. There should be a careful follow-up of the graduates to provide clues for program improvement.
19. Periodic evaluation by qualified experts should be used to detect and correct weaknesses.

Cooperative education has proven its effectiveness for more than fifty years although it has served comparatively limited numbers. Expanded cooperative education will open doors to new and exciting opportunities for students preparing for occupations not readily served in institutional settings.

The dire consequences to the individual and to society of youth unemployment are well known. At this very moment, while over 97% of all Americans over twenty are employed, almost fourteen of every one hundred of our out-of-school youth under twenty are not employed.

Cooperative education can contribute much to the solution of this major social problem--more perhaps than any other form of vocational

education. Statistics gathered over the years in thirteen northeastern states consistently show approximately 98% employment of graduates of this program.

Comparison of drop-out statistics of cooperative students with those in other programs also provide dramatic contrasts and stack up additional points in favor of broadening and expanding cooperative vocational education!

KEYNOTE BANQUET SPEECH

E. F. Laux

Ladies and gentlemen, it is a pleasure to be with you during this week of conferences which, I am sure, will be important to the future of education in this country. I know from talking to education specialists in our Company that vocational educators have been confronted for too long with what can only be called vigorous apathy. I congratulate your profession for its outstanding work in the face of limited support. Though it is hard to admit, we know that we in industry have not given vocational education as much help and encouragement as it deserves. But now the massive impact of science and technology on modern life has changed all that.

We know that nine out of ten scientists, engineers, and technicians who have ever lived are not only alive today--they're alive and kicking. And in the storm of change they have stirred up has come a new magnitude of demand for vocationally trained people. You have long seen this coming; the public is beginning to be aware of it; and industry is now wide awake to it. I doubt very much if educators will hear too many more businessmen advising them to, "Simply do a good job of teaching the three R's and leave the rest up to us." I'm certainly not here to tell you that.

Before I go any further, let me recount the story of a small school-boy who wrote an essay on Socrates. His entire theme contained only four sentences. He wrote: "Socrates was a Greek. Socrates was a great man. He went around telling people what to do. They poisoned him."

I am not here to tell anyone what to do.

I am here as a marketing man in the automobile industry--one, I hope, who takes a broad view of everything that affects our business. And I want to share a few thoughts with you about the youth of this country from that point of view. I think this view has relevance for your work because today's youth market is a leading factor in building an even more affluent society. As I see it, in the future a good vocational education will be as reliable a key to success as the baccalaureate degree has been in the past. I believe that vocational education can swing wide the door to full participation in the good life for millions of young people to whom it once was as tightly shut as the doors of the university.

As I said, the youth market is leading the way toward this era. It is the most dynamic and influential segment of a buying public which has pushed our economy to record heights that were not thought possible only five years ago. The economy is reaching the point where it will take more people to provide services than to produce goods. This development is creating a tremendous boom in opportunities for young people with good vocational educations. I'll come back to that part of my thesis in a few moments. But first, you might find it interesting, and I hope valuable, to take a brief look at one company's approach to the youth market that is helping push our economy forward so rapidly.

In the automobile industry, we see the under-twenty-five group as the market where the action is. Among other reasons, these young people compel our attention because of their sheer numbers. For example, between 1961 and 1962 the number of youths reaching the age of sixteen jumped by one million a year. Well over $3\frac{1}{2}$ million now reach this age every year, and this pace will continue through 1970. We have always been a nation of young people, but now we are at the point where being over twenty-five puts us in the older half of the country's population. By 1970, 60 per cent of the population will be under twenty-five.

One out of five licensed drivers is under twenty-five, some twenty million in all. (It is not my intention to snow you with statistics, but in marketing many of our decisions are founded on such facts.)

In the light of those statistics, it is not difficult to understand why the most powerful single word in advertising is "young." You might say, they've got us surrounded. (Those of you with teenagers at home know that you can feel surrounded sometimes with only one of them.)

At Ford Motor Company our Marketing Research Office makes continuing studies of the youth market. We know from such studies that 7 per cent of new car purchases are made by those under twenty-five years of age. We know that, of the purchases made by this age group, 41 per cent currently buy economy cars, 22 per cent intermediates, 27 per cent low-priced full size cars, 10 per cent medium-priced cars and virtually none select cars in the high-priced category.

In terms of our Company's total penetration of the automobile market we show a fairly straight line across the entire age spectrum, from under twenty-five to over sixty-five years of age. This is exactly the kind of line we want to see because it shows that we are successfully appealing to every age group.

However, when we turn to an individual model, like the Mustang, we find that its highest level of penetration is in the under-twenty-five age group. But even though its penetration decreases as the age of the various groups increases, it maintains a significantly higher level of penetration in nearly every age group than other sports models. In other words, this car appealed so strongly to young people's spirits that it also was most attractive to the spirit of youth in the older age groups.

I mentioned that those under twenty-five account for 7 per cent of new car purchases. This represents only half as many new car purchases as those made by the forty-five to fifty-four age group. But the success of the Mustang is a perfect example of why the youth market has a significance to the marketing man far beyond its present purchasing power. The Mustang's success demonstrates that the youth market, though much smaller than other age groups in terms of per cent of new cars purchased, is very large in its trend-setting power.

Another reason why I, as a marketing man, pay such faithful attention to the youth market is the fact that this huge body of young people

is fast growing up. Building owner loyalty has a high priority in our business. No one knows better than an educator how important those early years are in shaping attitudes and tastes for a lifetime. Naturally, we hope that by appealing to the young person with the Mustang, we will develop in him a loyalty which will bring him back to buy many more of our products over the years.

Just as important as new car purchases is the huge youth market for used cars. Nearly one-third of all used-car purchases are made by those under twenty-five, more than all the used cars bought by the forty-five to sixty-four age groups. Here again, early impressions count. I am sure most of us here remember quite clearly and quite fondly our first car, which was probably a used one on which we heaped a great deal of loving attention.

Of course, no marketing man, in or out of the automobile industry, bats a thousand in this game. The job of building loyalty for the future by appealing to young people today is not a process of Pavlovian conditioning, any more than your educational task is. We are both trying to hit moving targets from moving platforms.

In my business we do not see our job of dealing with the youth market--or any other market--as a process of molding the public's taste by subtle and ingenious lures. What we do is much simpler! Because people already have plenty of needs, we try to satisfy those needs instead of attempting to create new ones.

It is my understanding that this is the approach you are rightly using in modern vocational education--trying to give youngsters the kind of training they want and need, rather than attempting to force them into pre-cast molds.

I believe it is imperative for our nation's future economic and social well-being that we both continue to improve our aim and do an even better job of meeting young people's needs--in the marketplace and in the classroom.

We have come to believe that our society can be great only when each person has a fair chance to share the good life. We believe that this goal is not a dream for the distant future but is attainable, certainly, for every young person alive today. The fact that education is a necessary step for all who would share fully in the benefits of our society is not new. The fact is new that the nearest and best way for millions of young Americans lies in vocational education.

There was a time when vocational education suffered a severe handicap in that it was thought to prepare people for dead-end jobs. Although there might have been some truth to this criticism when the trades and technology changed at a slower pace, it is assuredly not true today.

Today, it takes sixty thousand different periodicals to record just a part of the scientific and technological advances made each year. And a good vocational education can be a thru-street to a career in which opportunities for growth and advancement are as numerous as the changes in technology itself.

The only time that a young person with a good vocational education will confront an occupational dead-end is when he stops trying to learn more. In this regard his problem is not much different from that faced by the young man with a fresh Ph.D. in physics.

In few industries today are the opportunities more plentiful or the demand greater for vocationally educated youngsters than in the auto industry. When we're not looking at young people as customers or at their influence on customers, we're looking at them as employees or potential employees. And I think, when I tell you some of the things we are doing, you will see that we genuinely share your desire for more and better vocational education.

To put the opportunity picture in focus for the auto industry, let me point out that one U. S. business in six is automotive. Over twelve million Americans are employed in the manufacture, distribution, maintenance, or commercial use of motor vehicles. Here's a close-up of just one of the areas of opportunity in this vast and complex picture.

There are more than seventy-five million passenger cars being operated by more than ninety-two million licensed drivers in the United States. Servicing these automobiles is not only big business, it is big opportunity for the young man who wants a career in a growth industry, who wants to be well paid, who likes to work with his hands and his head, and who is willing to get the kind of vocational education it takes to service a modern automobile.

I am not talking about a youth who can pump gas or change tires. I am talking about a young man with sufficient training to handle courteously and efficiently the demands of a motorist who drives into his local dealer with complaints such as these:

1. My automatic temperature control system needs adjustment.
2. My stereo-tape system is "off-pitch."
3. My automatic speed control is not working right.

Such complaints may sound like those reported by an astronaut orbiting the earth in one of NASA's space capsules. But they are not. They are real, every-day complaints that might be heard in any auto dealership.

Should we call the man who can cure these ailments a "grease monkey?" I think not. He is a bona fide service technician. And a young man doesn't simply "pick up" the skills needed to qualify for such a job. He gets them through a first-class vocational education program.

More and more, the complexities of modern automotive equipment require that we establish diagnostic service centers to add speed and accuracy to the process of determining your automobile's precise condition. These centers use hundreds of thousands of dollars worth of sophisticated electronic equipment to pinpoint car troubles. The automotive technicians who man and manage these centers are highly respected

in our industry. They are skilled people with responsible positions and, I assure you, they are very well paid.

In a society where job obsolescence is a fact of life for many, a career in automotive mechanics and technology promises to be an enduring one, and one which will offer continuing opportunity for professional upgrading and advancement. Wherever there are people, there are automobiles and the need for knowledgeable technicians to keep them in top condition.

Our Ford and Lincoln-Mercury dealers employ some sixty-seven thousand automotive mechanics. Because of attrition and the demand generated by continuing growth in sales, we must add at least three thousand new, well-trained mechanics every year. Since it is not possible to meet this demand with young men from vocational high schools, technical schools, and junior colleges, we are embarking on a multi-million dollar program to expand our service training capacity.

First, our Student Technician Program will be expanded. This is a cooperative Company-dealer activity which offers evening classes to vocational high school seniors. We will expand this program to a level which can provide six hundred new mechanics annually for our dealers.

Another joint Company-dealer job-entry training activity will include classroom instruction in our Ford service schools as well as on-the-job instruction. This program will train one thousand six hundred technicians a year on a going basis. The courses will include six weeks of formal classroom instruction in Ford Training Centers, supplemented by eighteen weeks of on-the-job training. Both the regular mechanic course and a body and paint course will be available. During his twenty-four weeks of training, the student will be a full-time employee of the dealer.

A third program will see Philco Corporation, a subsidiary of Ford, establishing a full-time school for automobile mechanics in the Philadelphia area. Philco, which has had much experience in training technicians for government defense and space work, will enroll, on a going basis, one hundred fifty students in day classes and one hundred fifty in night classes. They will pay tuition and will, of course, be able to choose whatever employer they wish. We hope that a good number will choose Ford.

Besides these three programs, the Ford Motor Company Fund conducts a scholarship program to encourage students to enter the field of automotive technology. (The Ford Fund supports educational, scientific, and charitable programs, financed by contributions from Ford Motor Company. It is not related to The Ford Foundation.)

The Fund will provide approximately one hundred two-year scholarships this year to children of employees of Ford Motor Company dealerships throughout the nation. Winners will study automotive technology at qualified community colleges, junior colleges, and technical institutes. In addition to paying full tuition and stipends toward room and board, the scholarships will provide an annual \$250 contribution to the general education budget of the college for each scholarship student in attendance.

The Ford Fund has also contributed to the Plans for Progress 1966 Vocational Guidance Program. This program will sponsor institutes in eighteen cities to acquaint high school officials and counselors with business needs and methods to improve preparation and motivation of underprivileged youth for jobs in industry. Many of you, no doubt, will be involved in the project.

Our Company also provides vocational education for thousands of young men by conducting apprenticeship training in twenty-seven industrial skilled trades. I'm told that we are continually developing basic text materials and furnishing them to schools throughout the country where our apprentices take their related classroom instruction. Because we know that once a young man has completed his apprentice training his skills will not automatically remain current, we also carry on a constant program of up-dating and improving the skills of journeymen.

We are now running programs in several Ford plants which offer employees who did not finish high school the chance to do so. Regular classes are held on-site and are taught by local public school teachers. Students attend classes on their own time and pay no tuition. We feel that this is vocational education in the broadest and best sense of the word. Thousands of our people, of course, take vocational courses at local schools and colleges on a Company, tuition-refund program.

As you can see from these few examples, we are very deeply committed and involved in the business of vocational education. There are few places on the vast, industry-education interface where stronger common interests exist than in the area of vocational education, and no place where we can make better use of shared knowledge and cooperative efforts. In our industry, as in others, we need our quota of Ph.D's. But we also have a sharply growing need for alert, well-educated men who have great interest in, and knowledge of, production machinery--men who get great personal satisfaction out of making, assembling, and, let me stress this, selling fine products.

As a salesman deeply interested in the motivations of young people, may I offer just one suggestion to you who, as educators, are equally concerned with motivating youngsters? It is simply this. I think you have a great opportunity to capitalize on a very powerful interest of young people, at least young men, in drawing them into vocational education programs. I am speaking of the compelling interest so many young people have in automobiles. Putting that interest to work in appropriate vocational education programs can be a powerful force in laying the foundation for an enduring career. If you're thinking this sounds like a pitch for the industry of which I am a part--you're right. But it is a completely sincere one.

I have tried to point out how young people are playing a leading role in propelling our economy toward a new level of abundance, an abundance we are determined to share with all who wish to share it, an abundance which is creating millions of opportunities for the building of rewarding, well-paid careers. In this context, you men and women who are leaders in vocational education are really where the action is in education today. Business and industry are doing a great deal to meet the demand for

well-trained people. We will have to do even more, but we'll never be able to do enough. Vocational high schools, cooperative education programs, technical schools, and community and junior colleges must also be fully geared up to meet our economy's need for skilled people.

In recent years, we have succeeded in convincing Americans that a college education is their best key to the future. One wag has even suggested that, if the number of those receiving college diplomas continues to multiply at its present rate, by the year two thousand there will be more college graduates than people in this country.

Now, I think the time is ripe for an all-out drive to provide the world's finest vocational education opportunities for our young people. Government, industry, and, increasingly, our young people are becoming alert to the great need. Our booming economy, spurred by the nation's youth, is creating both the demand for better vocational education and the means to provide it. I am confident that your work will prove the necessary catalyst to make this drive a reality.

AN ADMINISTRATIVE, COORDINATION, AND LEARNING MODEL FOR COOPERATIVE DISTRIBUTIVE EDUCATION

Ralph E. Mason

When considering a model for any cooperative education program, there needs to be a rather clear-cut understanding of the objectives and capabilities of cooperative education programs. The position taken in this presentation is that: (1) the student-learner's career objective determines his program classification, and (2) the subject matter presented in the related instruction and the educational opportunities at the training station, as revealed by a carefully prepared training plan, determine how well his career objective may be served.

Also, the teacher-coordinator may well ask himself: "In light of this enrollee's career objective and his planned training station learning experiences, which type of related classroom instruction would have the most vocationally useful outcomes for him--interrelated cooperative education, distributive education, cooperative office education, cooperative industrial education, or, in some communities, cooperative agribusiness or the cooperative home economics occupations program.

Turning our attention now to distributive education, it is suggested that a sound administrative, coordination, and learning model can be built around the elements represented in the diagram in Chart 1, Organization of Instruction for Cooperative Education Program. From the chart, a three dimensional program of instruction emerges, including related classroom instruction as one dimension, supervised on-the-job training as a second dimension, and a youth group to supplement instruction as the third dimension. Both the classroom phase and the on-the-job phase recognize the need for handling the demands of the immediate job through specific instruction, but also handling the teaching of underlying principles to be generalized through group instruction and independent study.

Coordination time to the extent of one-half hour per week per student enrolled should be provided for the teacher-coordinator. He needs this time for surveys, public relations, selection and recruiting, locating and developing training stations, planning specific and basic instruction, evaluating student-learners and training stations, carrying out action research, and planning adult education, among other things.

Instruction in distributive education must be concerned with the learner's need to acquire occupational skills, information, and job intelligence basic to all distributive occupations as well as with his need for specialized skills and information requisite to his career objective in distribution. Let us consider four areas of objectives which determine the direction of this learning.

The first area of objectives concerns those concepts, principles, skills, and attitudes common to all distributive occupations, concentrating on the following topics:

1. School and Business Relationships
 - a. Orientation
 - b. Human relations

2. Economics of Distribution
 - a. Free-enterprise system
 - b. Supply and demand
 - c. Pricing
3. Marketing
 - a. What marketing is
 - b. What marketing does
 - c. Marketing institutions
 - d. Marketing research
4. Personal Development (recurring topics during the school year)
 - a. Human relations
 - b. Mathematics for distribution
 - c. Business communications
5. Retailing and Merchandising
 - a. Getting started in a retail business
 - b. Basic job skills in retailing
 - c. Merchandising and management principles
6. Career Opportunities in Distribution

A second area of objectives for this program concerns the student-learner's building of occupational skills and knowledge applicable to the particular initial job in which he is placed. Each student's individual learning outcomes are stated in the "step-by-step training plan" created for him by the teacher-coordinator and the training station sponsor. These learning outcomes are emphasized in the informal individual conferences of student-learner and teacher-coordinator and/or training station sponsor.

A third area of objectives for this related instruction concerns general education. The close association of teacher-coordinator and student-learner should contribute to improvement in the student's ability to read, write, and compute. The related instruction content should contribute to an understanding of the field of business and to the student's personal and general economic understanding.

The fourth area of objectives concerns the student's career objective. While instruction in the principles of distribution should contribute to this goal, the student should receive individual instruction that furthers his objective. This instruction is, of necessity, not closely related to the career objective.

It has become evident to us in distributive education that we need to take a "discipline approach" to planning instruction and avoid viewing D. E. as a "course." A logical curriculum or series of courses and experiences need to be planned to accomplish the objectives outlined above.

Contemporary thinking would have the curriculum consist of:

1. Preparatory (pre-employment) courses of at least one year, such as "Introduction to Marketing and Merchandising," followed by

2. Cooperative method of instruction of at least one period for one year in-school plus at least four hundred fifty hours (thirty weeks of fifteen hours a week) of instruction on the job in a training station.

Suggestions for the preparatory or pre-employment education beginning at freshman, the sophomore, or junior levels depending on the needs of the particular school system would include the following:

1. General education in the common areas of language arts and communications, mathematics and science, social science, physical and health education, and practical arts for general education, such as homemaking and industrial arts. The D. E. student might well take such courses as "General Business" and "Economics."
2. Business courses providing background in such skills as book-keeping, typewriting, business arithmetic, and business organization and management.
3. Introductory courses in distribution, including such courses as "Retailing," "Salesmanship," and "Principles of Marketing and Distribution."
4. Employment instruction through the cooperative experience, including the related class of at least one period daily. This class might well be called "Distributive Practice" or simply "Distribution I" and "Distribution II."

A cooperative distributive education program in the high school, planned as outlined above, is designed to prepare students for initial entry jobs in areas of marketing such as manufacturing, storing, transporting, financing, risk-bearing, wholesaling, retailing, and servicing. Distributive education is concerned with marketing occupations and not with industrial or office occupations.

This model provides occupational preparation which aids the student-learner in acquiring general skills and knowledges applicable to all distributive occupations and in acquiring specialized skills and knowledges applicable to the training station where he is placed. Also, this background prepares the student-learner for advancement on the job.

COOPERATIVE OFFICE EDUCATION

James H. Wykle

In reading about, speaking of, or discussing vocational education, all kinds of nice adjectives have been used describing its past. One such adjective used is "illustrious"--vocational education has an illustrious past. It might be called that, but it has been a hard past also. It has moved from the apprenticeship method in the older days to the on-the-job training (meaning more pay, perhaps, but still learning as you work) to full-time vocational school, to vocational education programs in comprehensive public schools. With the increased need for vocational education there have been more and more agencies employed to meet the training needs of the people. From past experience it is known that a vocation cannot be completely mastered in the classroom. It is known that there must be a definite relationship between the learning of facts, the acquiring of habits of thoughts and attitudes, and the mastering of skills which will weld them together in the training experience of the learner. The schools' main functions are to teach facts, concepts, and principles, and in building attitudes. These functions are made more realistic in harmony with the daily vocational activities of the person being trained. In this way of thinking, the world of work becomes a part of the school's curricula--cooperative education is coming into its own.

In business education the development of skills has always been important but related information was not overlooked. Business educators have striven to include information with which to add meaning and understanding to skills. How closely employers and educators worked together in business education is evidenced by the fact that office occupations work-study programs increased even without the encouragement of Federal funds. Many of the state departments of education were putting these programs to work, but increased funds always help. The Vocational Education Act of 1963 gave encouragement for much expansion in the cooperative office occupations programs. Federal and State funds are now promoting and supporting occupational preparations in order to meet critical employment needs.

In the secondary schools the cooperative plan of instruction is being used to provide vocational training. The cooperative plan of instruction can be applied to different areas of occupational education. The components of competence in each occupation vary in kind and in the degree to which they are important. Occupations vary in the degree to which the skill can be developed in school and applied on the job as opposed to being developed primarily on the job. For example, the basic skills of typewriting and shorthand must be learned in school under controlled conditions. Yet, in some industrial occupations the machines on which skill is to be developed are too expensive and specialized to be taught in the schools. It is found, however, that in all occupations the job provides the student-learner with the realistic setting of fellow workers, supervisors, and the standards and atmosphere of actual employment.

A definition then might be--the cooperative plan of vocational instruction develops occupational competencies through supervised occupational experiences while related instruction is given in school. This plan also emphasizes discussions in school of problem situations encountered on the job, of benefits from supervision, and constructive criticism.

In order to provide the function of vocational instruction, the cooperative plan should include the following:

1. Related instruction in school which is comprised of two kinds of instruction:
 - a. Basic related instruction--this has to do with those concepts, knowledges, skills, understandings, and attitudes needed by all the students as basic to occupational preparation;
 - b. Specific related instruction--those concepts, skills, and attitudes needed by the individual student-learner to handle the duties and responsibilities of his career objective.
2. Career objective--requiring the student-learner to have the express purpose of preparing for an occupation or an area of occupations; he is a student in the secondary school and a learner in an occupation in the supervised experiences.
3. The curriculum--an instruction program is necessary that includes a series of courses which develop the information and skills, concepts, and attitudes needed before a student is placed as a cooperative student-learner.
4. Classroom facilities and instructional materials--the facilities and materials must be adequate for teaching vocational information, skills, and attitudes. It is the ideal situation to have a special budget available for instructional materials.
5. The training station--a cooperative business is selected according to standards which measure its ability to give the opportunities for a supervised educational experience to prepare the student for his career objective.
6. Training plan--a plan must be formulated to indicate what is to be learned and whether it is to be taught in the classroom or in the training field.
7. The teacher-coordinator--this person is employed by the school to operate the cooperative education program. He must have technical and professional education and business experience. He teaches the related classes at the school and coordinates the employment learning experiences with the school learning experiences of each student-learner.

8. Time for coordination--there must be time for the coordinator to carry out the organized program of activities that unite the training station experiences with the classroom learning experiences of each student-learner. How much time depends upon the number of student-learners and the location of the training stations. Coordination is the activity outside the classroom performed by the teacher-coordinator to organize, administer, operate, or improve the program.
9. Supervision in the training station--in each cooperating business there must be appointed a person who is directly responsible for the occupational learning experiences of a student-learner on the job. This person may be a manager, a supervisor, or an experienced employee.
10. Definite school policies for the program--a local plan of administration and operation should be formulated regarding student-learner recruitment and acceptance to the program, class scheduling, school credit for the classroom phase, and the training station phase, essentials for the training stations, responsibilities and duties of the teacher-coordinator. A record system should be set up with facilities to accommodate current records on students and training fields and follow-up records on graduates.

An ideal situation would be to organize a committee to represent the student's school, parents, and business to serve in an advisory capacity to the superintendent and teacher-coordinator.

The preceding elements make up the coordinating program. What are considered office occupations? Office occupations may be defined as the duties performed in private or public businesses which serve management through organizing, planning, interpreting, communicating, and filing the financial and other data about the business.

The general objective of the cooperative office education program is to prepare qualified high school students vocationally for initial office jobs such as those classified in the Dictionary of Occupational Titles. This background also prepares the student-learner for advancement on the job.

If this is the objective of the cooperative program, then when is it feasible to begin such a program?

The idea of beginning a cooperative program in a community may originate with the superintendent of schools, with an office occupations teacher, with the principal, or with a business group within the community. Of course, before any can have this idea of the cooperative program, he must know about it. Many times this task must be executed firmly by the state supervisor of office occupations or a member of the staff. No matter where the idea originates, the superintendent of schools must be consulted about the possibility of beginning the program--he is concerned with developing the curriculum in his school and

with maintaining standards in order to qualify for vocational funds for reimbursable programs, but the responsibility for the organization of the program is usually given to the prospective teacher-coordinator--this person becomes the key to the success of the program.

This person must be a teacher, a business man or woman, a counselor, an administrator, and a public relations person--some specific characteristics of this key person of the cooperative program are:

1. First, he must be a proven successful classroom teacher. He must be able to command the respect of the age group with which he works. He must be flexible and able to teach what is needed when it is needed. He must have a keen desire to help young people to develop into competent employers, supervisors, craftsmen, and managers. He must command the qualities which he expects from his student-learners--ambition, courtesy, promptness, and respect.
2. He must have a good background for learning and teaching--methods, courses developed, effective teaching techniques, and psychology courses taught him how learning takes place. Practice teaching further implants these knowledges. The coordinator must have in addition an understanding of the learning process and how vocational learning is strengthened by correct procedures and techniques in the classroom and on the job. The cooperative method must provide a feedback from the job to the classroom to the student learner and to the teacher-coordinator. Feedback emphasizes learning processes.
3. He should have had experience in the world of work. He is a combination teacher-personnel manager dealing with students, parents, other teachers, administrators, job supervisors, managers, and owners. He must have mature judgment of a successful teacher and of a successful employee as well. It is desirable for his experience to be in the kinds of jobs and firms in which his students will be working. He needs the ability to think in terms of the office and to talk in the language of the office. It is ideal if the coordinator should gain additional occupational experience after he begins coordinating--thus he keeps up with change and expansion in his area.
4. The coordinator should have the ability to plan the physical facilities for his cooperative program.
5. He must have physical and mental stamina. He cannot be a coordinator by telephone. There is no substitute for personal contact.
6. He must have specific academic requirements including graduation from an approved college with a major in the subject matter associated with his field in vocational education. It is wise of the prospective coordinator to check the certification requirements of his state board of vocational education--these state requirements vary.

7. He must have the ability to coordinate. Many activities make up this ability and even those activities may vary some in different situations; but a coordinator is working when he is using his coordination time wisely to develop his student-learners, to develop his training stations, and to develop his program.
8. He must be professional--coordinating this program is not just another duty--he must believe in his work--be able to justify the program and his activities.

Now, assuming that the superintendent recognizes the value of the cooperative program and has a prospective coordinator in mind, what is his next step? He might seek the advice of interested people within the school and local community.

A steering committee, temporary in nature, may be formed from people in education, business, labor, parents, and the news media. After being orientated to the goals and objectives of the program, this committee's function is to reply either affirmatively or negatively to the question: "Shall we begin a cooperative office occupations program in our school?" At this time it is well to survey the student body and the business community in order to find the following information:

1. Is there a need for trained, career-minded persons in office occupations in the community?
2. Are there opportunities for part-time training placements in the business community?
3. What are the vocational interests of the high school students which could be met by a cooperative program?
4. Are the physical facilities adequate for cooperative education?
5. Find the locations of recent graduates and the occupations they now practice.

If the answer of the steering committee is in the affirmative, an advisory committee should be appointed. This committee should be a sounding board for advice on operating procedures. It could suggest training stations, sources, and types of instructional materials.

It is now time for the teacher-coordinator to begin his work. He must distribute information to school personnel, guidance counselors, staff, students, and parents; he must make contacts in the community for possible training fields; he must counsel and interview prospective student-learners and cooperate with guidance counselors in testing them; he must assist in arranging class schedules; he must arrange for related classroom facilities; and he must arrange for textbooks, reference books, and supplies.

Those things are accomplished before the program actually begins. Remember, too, this coordinator is also the teacher of the related classes. He needs approximately one-half hour per student per week to accomplish his responsibilities other than classroom teaching. This will vary--more time would be needed if there is a great geographic spread of training fields, or a newly organized program.

There are certain procedures which the coordinator used in order to organize the various training fields. The employer must understand the responsibilities and conditions regarding his part and his firm's part in the cooperative plan:

1. The employer must understand the nature and scope of the program.
 - a. It is a training program and not a school employment plan. The firm must help the learner with individual assignments if necessary.
 - b. The employer must assist the school by providing planned experiences and on-the-job instruction.
 - c. The employer must provide at least fifteen hours of employment a week throughout the school year (the working hours must work in with the school hours--also number of hours will vary in state plans).
 - d. The employer must pay wages according to state or federal wage laws for beginning student-learners; this amount may be increased in proportion to the learner's productivity.
 - e. The employer must understand that, through counseling, the student-learner has a tentative career objective; the student is enrolled in related classes at school and he should be given opportunity to move from one job activity to another in order to have more experience.
 - f. The employer must understand that the student-learner must be treated as all part-time employees concerning social security, insurance, and labor laws.
 - g. The employer must understand that the coordinator will visit the student-learner, observe his work, make suggestions for on-the-job training, and determine the job activities to which classroom instruction should be related.
 - h. The employer must make periodic ratings on the performance of the student-learner and report these to the coordinator.
2. There must be developed a training plan which will bring into focus the career objectives. Through such a plan the student better understands his vocational objective, and the employer

also is more aware of the student's goal and is encouraged to lead him forward by providing adequate work activities and instruction.

3. The coordinator must develop a training memorandum; this memo will vary; it should contain name of student and all information concerning him, his training station objectives, etc.
4. After the initial general training plan has been made, the coordinator should make a step-by-step training plan so that he, the student, and the employer will know exactly where they are.
5. Preparation by coordinator of a complete training plan is necessary--this is a combination of the memorandum and the step-by-step training plan. Since there is a wide range of capabilities and career objectives of student-learners, some training stations are better for some students while another training station might serve to more advantage for another student. In preparing a complete training plan, learning outcomes should be identified for the career objectives of each learner. The continued success and future development of sound cooperative programs will rest on how well the coordinators identify good training stations and then place in those stations the career-minded student suited to it.
6. The coordinator then must select and orient the supervisor or sponsor within the training station. One person should be responsible for supervising the experiences and instruction on the job of the student-learner.

This does not conclude the work of the coordinator. This very efficient and busy person must prepare the student-learner for his role in the cooperative program.

1. The students are interviewed by the employer, acquainted with work regulations and time schedules, and are assigned to training stations early in the school year.
2. The students should know that they must have time for part-time employment while they complete school requirements, that they must produce well on the job, that the coordinator will visit them at the training field and evaluate their progress, and that the local rules on grades, credit, etc. are for them.
3. The student uses the training plan, too. He is given a copy of the plan and asked to do the following things:
 - a. He lists title of job, his career objectives, and some areas in which he hopes to gain experience.
 - b. He prepares a weekly report which indicates areas in which he is gaining instruction on the job.

- c. He summarizes at least once each grade period the learning outcomes of job.
- d. He evaluates at the end of school year his training.

At this point the teacher-coordinator knows what his job is, the employer knows what his part is, and the student-learner knows his role in this cooperative program. The coordinator continues to make plans. It is his responsibility to determine the time schedules for employment. It is his responsibility to give interview techniques to the students and then decide how many students are to be sent to each employer for an interview. The final decision for employment should be made by the employer.

Those are many of the responsibilities and problems of getting a cooperative education program started. Once a cooperative program has been inaugurated, the teacher-coordinator has new activities. The importance of a continuous program of maintenance activities and improvement activities cannot be overemphasized. The coordinator must work constantly with the training field, or that field may turn into a general work experience program.

There are routine activities which occupy the coordinator during the entire year; therefore, it is desirable that he be employed during part of the summer. Many systems are placing this person on a twelve-month basis.

Even though the program is organized, the coordinator continues to improve instruction in the training stations, make visitations to the training stations, measure the performance of the student in the station, find and select new training stations, carry on a sponsor development program (review their duties), report to cooperating employers on instructional activities, continue a public relations program, evaluate the program through follow-up of graduates or program reviews (usually the coordinator and outside consultant look over what is being done and discuss how it can be improved), and if time exists, conduct some form of research such as community surveys or placement studies.

Up to this point most of our discussion has concerned the cooperative program and its organization outside of the classroom.

The related classroom work is of equal importance, naturally. Remember the coordinator is above all a teacher. He designs the necessary learning experiences that enable the student to work toward his career objective. He is knowledgeable about the student and his training station in order to design in-school instruction that is correlated in time and sequence with the occupational experiences; therefore, it is the belief of most leaders in cooperative education that the ideal learning situation is structured by a coordinator who teaches his student-learners in the related class in school.

The cooperative program in office occupations is designed as a capstone experience for a curriculum in which students are enrolled who have career interests in clerical, stenographic, and bookkeeping

occupations. The typical curriculum usually gives beginning and advanced courses in typewriting, bookkeeping, and shorthand. There has been a trend toward copying these skill courses with a senior year laboratory practice type course in order to integrate the skills. The course may be one or two semesters and identified as "Office Practice," "Clerical Practice," "Secretarial Practice," or a similar name. The cooperative office occupations program is now a more recent curriculum addition. The cooperative programs are almost entirely a capstone of a curriculum of at least two years. The prerequisite courses build skills and information necessary to place them on the job as student-learners. The size of the school will help determine the sequences--but specialized sequences may be used with a cooperative program for each specialization--clerical, stenographic, and bookkeeping.

However, the general plan should look like this:

1. Grade twelve
 - a. Cooperative office experience--one-half day.
 - b. Related class for student-learner either one or two periods; in titles "Cooperative Office Practice," etc. (one of other names).
 - c. Electives--one or more periods in general education such as English or in related office occupations courses such as advanced shorthand, bookkeeping, or office machines.
2. Grades nine to twelve. Prerequisite office occupations subjects depending on interest and aptitude of student--beginning shorthand, typewriting or bookkeeping, general business, business arithmetic, business English, etc.

This is a general outline and alternatives are possible. For example--if the cooperative related class is a double period, skills can be developed in that class that normally could be developed in other classes such as operation of calculators, duplicating machines, transcription, shorthand, speedbuilding, business correspondence, and filing.

This cooperative office occupations program is not intended as an addition to an already full curriculum. The student learns through this on-the-job training and through these related classes some concepts and skills which would be taught in other classes if he remained in the classroom.

I'd like to mention briefly that cooperative education for office occupations is likely to become a very significant part of the post-high school curriculum and in the near future. In fact, due to the national emphasis on adult education and retraining as one of the tools to reduce poverty, there is in progress a vast expansion of the post-high school movement in American education at this time. This demonstrates the need for expansion in the field for more specialized occupations.

In an effort to expand the real usefulness of cooperative office education, I have conducted an unofficial study--the voluntary assistance of the respective states--on the various policies and procedures of their cooperative occupations program.

The willingness of the states to help me in this undertaking resulted in a compilation of some very useful and excellent information, from which I have prepared a study into a type of state comparison.

To give you a picture of the trend in the states, I am going to share with you some of the most pertinent findings of my inquiry.

Of fifty states assisting in this project, seventeen did not have written policies and procedures at the state level. Eight states plan to implement such a program during the next year. One state, which does not have written policies and procedures, is following those of the Distributive Education program for the state level administration. Some of the states administer these programs only at the local level. One state has made a provision for the cooperative office education program, but it has not employed or appointed a state supervisor.

By permission of the state, another state has under consideration a submitted plan at the local level. Upon approval, it will be conducted as a cooperative office education program.

Most prevalent directions discovered through this unofficial endeavor are:

1. The teacher-coordinator is usually required to have at least one year of experience in a business office.
2. The coordinator is required to have a degree in business and office education. A few states require work beyond the baccalaureate degree.
3. Some states require two years of successful teaching experience. However, most states were in agreement that office experience is more important than teaching experience provided the coordinator has the B.S. degree.
4. Employment is for at least one month beyond the regular school employment, and in many cases the employment is for twelve months.
5. Some states require coordinators to receive credit in the following courses:
 - a. History, principles and philosophy of Vocational Education
 - b. Methods and materials of Teaching Vocational Business and Office Education
 - c. Occupational Analyses in business and office education

- d. Techniques of Coordination in business and office education
- e. Problems of the coordinator
- f. Organization for coordination of cooperative education
- g. Administration and supervision of cooperative programs

These courses are the primary ones required of the teacher-coordinator. Some states require part of these courses before an individual can be employed as a coordinator. Others allow for two years to take four courses.

The schedules of coordinators vary. The inquiry revealed that: Most states provide for at least two class periods of released time for coordination. Some provide double periods and others provide for two periods, which may not follow each other. Some states limit the coordinator to teaching three periods of a six-class-period day. This allows at least one period for consultation with the students.

It was found that there were exceptions among the states. One state based its program on one hundred eighty classroom hours divided into the "Core" content and the "Fringe" content. It is half and half; except for the first month, twenty hours includes the "fringe" work. The "core" instruction is divided into six units from the orientation to the skill development.

When reading through the state policies and procedures, when working with the leaders in office education, when observing what is being done in the various state departments and in the individual schools, it appears that the concepts of cooperative office education must change continuously. Development and advancement in this area are possible only when new ideas and concepts are formulated and when they are implemented into practical use. Current concepts constitute the only valid criteria by which the program can change and progress.

Thus, we are beginning to see the necessity for cooperative office education. Through this insight, through strong leadership among the office educators and the business office, through a great deal of patience, and through much hard work, every state will have strong cooperative programs--thereby, providing the business world with the kind of employee who adapts to the changing world of business.

ADMINISTRATIVE, COORDINATING AND LEARNING MODEL
IN INDUSTRIAL COOPERATIVE EDUCATION

Sam W. King

Role of Industrial Cooperative Training in Total Education Program

There are many different possible patterns of operation of Industrial Cooperative Training¹ programs depending upon local needs. ICT may be offered in grades eleven and twelve in high school, at the post-high school level, and special programs may be designed for high school dropouts or potential dropouts. It would be impossible to discuss all the various patterns of operation in the time allotted to this portion of the panel discussion. My discussion will be limited to the following type of program:

1. High School--grades eleven and twelve
2. One teacher-coordinator
3. Multi-occupations
4. Half-day in school--half-day On-the-Job Training²

I feel sure most of my recommendations will apply to any pattern of operation, and the model program I will describe can be adapted to fit local needs. (Explain Chart 1)

Students may enroll in ICT upon completion of sophomore year of general education curriculum. Students may enroll in ICT at beginning of senior year after completion of one or more years of Day Trade shop. The student would be expected to continue training in the same occupation.

Upon completion of one or two years of ICT, the student will have four choices. He may start working full time as a semi-skilled worker or advanced helper in the same occupation and in most cases for the same employer. This is the primary objective of ICT--to prepare boys and girls for useful employment in occupations of their choice. But there are other alternatives--and this is one of the strengths of the program.

The student may continue his education in a college or university and become a professional worker since students are able to complete the necessary courses for a high school diploma and entrance requirements of most colleges.

¹Industrial Cooperative Training will be referred to as ICT.

²On-the-Job Training will be referred to as OJT.

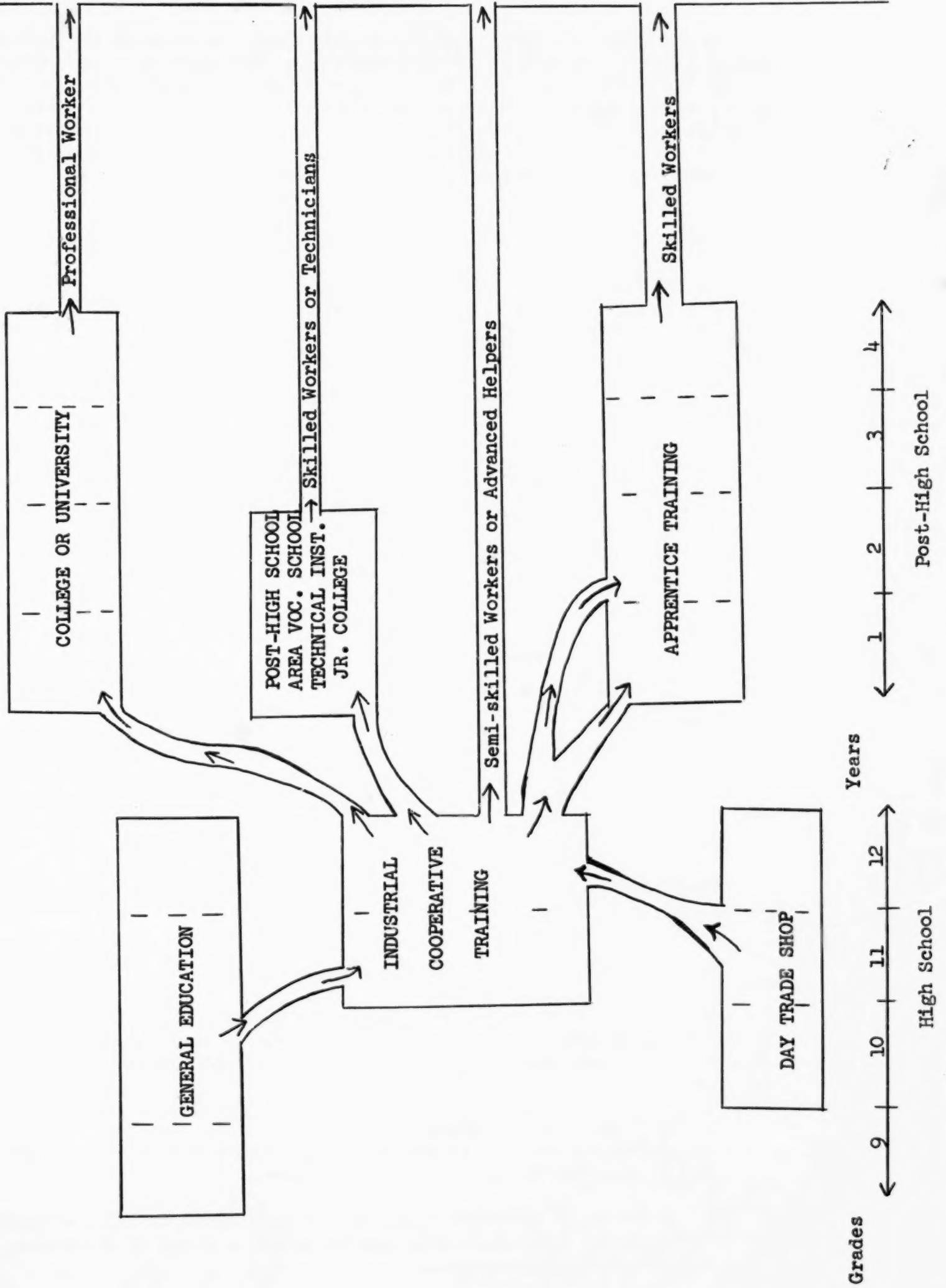
Chart 1

ROLE OF INDUSTRIAL COOPERATIVE TRAINING IN THE TOTAL EDUCATION PROGRAM

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The student may take advanced occupational training at the post-high school level and qualify for employment as a skilled worker or technician. Or, if the ICT student has been employed in an apprenticeable trade, he may elect to continue his training through apprenticeship and qualify as a skilled worker or journeyman. In many cases the joint apprenticeship council may give the ICT graduate credit for his training and start him as a second-year apprentice.

Organization of Instruction for an ICT Program (Explain Chart 2)

An ICT program is under the same school administration as other high school courses. A full-time teacher-coordinator is employed by the school to teach the related class and coordinate the on-the-job training. The training sponsor or employer is responsible for the manipulative aspects of the training through on-the-job training. An advisory committee is appointed by the school superintendent to serve in an advisory capacity to both the school and the training sponsor.

The technical information learned in the related class and the on-the-job training supplemented by the Vocational Industrial Club program combine to provide the total instructional program. The results, hopefully, are a vocationally competent, socially adjusted worker, and an intelligent and productive citizen.

Legal Aspects of ICT

Training of homogeneous groups of students was included in the Smith-Hughes Act in 1917. In 1931, the Federal Board for Vocational Education modified its policies on cooperative part-time education to permit training of youth employed in a variety of occupations. Cooperative training--for budgetary purposes, at least--is still classified as Part-Time General Continuation. However, due to special requirements and standards, this type of program is considered a special phase of part-time education. ICT programs which qualify for Federal reimbursement must conform to Federal regulations.

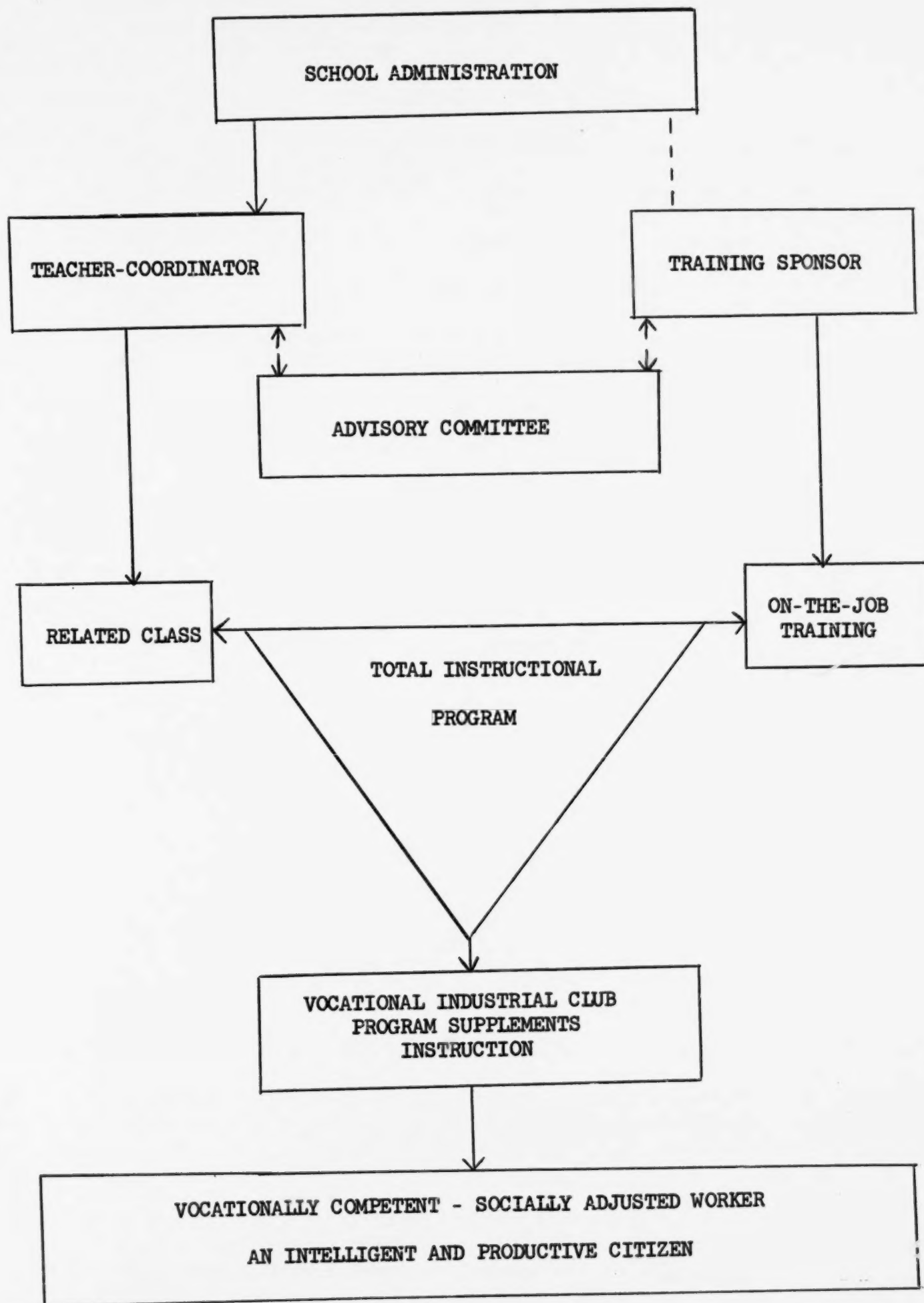
Reimbursed programs must also conform to the respective state plan requirements.

Standards for Approval

Approval of reimbursed programs is a function of the State Boards of Vocational Education. The standards vary from state to state. Generally speaking, programs should be approved only when the following criteria are met:

- A. Data from an industrial survey indicates a need for training and there are sufficient employers interested in the program to provide adequate training stations.
- B. A survey of students eligible for enrollment in ICT indicates there is sufficient interest to enroll a class of a minimum of twenty-four students.

ORGANIZATION OF INSTRUCTION FOR AN INDUSTRIAL COOPERATIVE TRAINING PROGRAM



- C. The school has or will provide suitable classroom facilities and provide financial support necessary to provide necessary reference library and study guides for the related class.

Standards for Organization

A. Qualifications of Teacher-Coordinator

1. State Plan Requirements
2. Desirable Qualifications
 - a. Baccalaureate Degree
 - b. Minimum of three years work experience preferably in two or more industrial occupations or skilled trades
 - c. Three years of teaching experience in public schools, preferably in industrial education
 - d. Completion of three teacher training courses for ICT coordinators prior to start of school term

Day trade shop teachers, who have completed work for baccalaureate degree, and industrial arts teachers who have the required amount of work experience, are excellent prospects as coordinators. There are many desirable personal characteristics which may compensate for lack of other qualifications.

B. Duties of Teacher-Coordinator

1. Organize class
2. Teach related subjects
3. Organize instructional material
4. Coordination

C. Length of Program

1. Two years (Some one-year occupations)
2. Nine months or thirty-six weeks per year
3. Minimum of twenty hours per week on the job and maximum of twenty-five hours per week (Exclusive of Saturday)

D. Advisory Committee

Since success of a cooperative training program depends upon the close relationship and cooperation between the school and industries of the community, there is a definite need

for an advisory committee to guide the school in inaugurating and maintaining a program which will best meet the training needs of the community.

1. Appointed by Superintendent of Schools (with assistance of coordinator)
 2. Representatives of employees, employers, and general public (Minimum of five plus coordinator)
 3. Duties
 - a. Advise as to general training policies
 - b. Advise as to fitness of training stations
 - c. Review wage scales
 - d. Recommend approval of training plans
 - e. Assist in conducting surveys
 - f. Assist in promoting and publicizing program
 - g. Assist in evaluating the program
 4. Craft Committees--ad hoc committees
- E. Selection of Students
1. Eligibility of Students
 - a. Sixteen years of age
 - b. Junior or senior classification
 2. Procedures in Selection of Students
 - a. Spring enrollment
 - (1) Announcements
 - (2) ICT student talks in home rooms
 - (3) Referrals from counselors, teachers, and principal or registrar
 - b. August enrollment
 - (1) Newspaper publicity
 - (2) Letters to prospective students and parents selected from student record cards

Students are usually selected after personal interviews; review of information on application blanks; check of school records; and conferences with counselors, principal, and former teachers of the students.

3. Factors in Selection of Students

- a. Interest in training
- b. Physical and mental suitability
- c. Moral reliability
- d. Educational background
- e. Disciplinary and school attendance record
- f. Past work experience
- g. Recommendations (teachers, counselors, principal)

Selection of students is one of the most vital factors in maintaining a successful program. One or two "foul balls" can ruin a program by creating the image that ICT program is primarily for this type of students. Coordinators will then find it is extremely difficult to recruit desirable students. Once an unfavorable image is created, it will be years, if ever, before a new image can be created.

F. Selection of Occupations

While the ICT program should be diverse enough to meet the training needs of the community in several fields of employment, the coordinator should not attempt to provide training in such a wide variety of occupations as to make his program unwieldy. Generally, no more than eight to ten occupations which are prevalent in the community and which lend themselves to the apprentice plan of training are preferred.

The State Vocational Education Agency should provide schools with a list of occupations approved for ICT. The list should show the occupational title and code used in the "Dictionary of Occupational Titles." To qualify as an approvable occupation, an occupation should meet all three of the following criteria:

1. Must be a trade and industrial occupation
2. Must require at least two thousand hours of organized training
3. The related technical information required must be sufficient to justify the enrollment of students for three hundred fifty hours of related instruction.

In selecting occupations, it is necessary to comply with State and Federal laws regulating employment of minors in occupations which have been declared hazardous. The coordinator should also avoid occupations for which States have set up licensing requirements such as embalming, beauty operator, barbering, etc.

G. Selection of Training Stations

The chief factor in selecting an employer, training sponsor, or training station is the attitude of the employer and his employees toward the cooperative training plan and their willingness to provide well-rounded work experience. In addition, the following factors should be considered:

1. Respectability and responsibility of the employer
2. Training equipment available
3. Competent employees
4. Volume of business
5. Variety of work available for training
6. Wages to be paid student-learner
7. Company policy toward student-learner
8. Standards of workmanship required
9. Degree of specialization required
10. Employer-employee relationships existing

Generally, the following types of training stations should be avoided:

1. Employees work on a commission or piece-rate basis
2. Located remote from the community
3. Located in disreputable sections
4. Located in same building or adjacent to a place where alcoholic beverages are sold

H. Placement of Students

Placement of students involves the selection of a particular student by the employer, and the preparation of training agreement and training plan. If at all possible, the employer should have the opportunity to interview two or more students in making his selection. Coordinator must use his own judgment whether to send the student for an interview

or to go with the student and introduce him to the employer. The student should be briefed prior to the interview and the employer furnished as much information about the student as is available. The coordinator should avoid giving his personal recommendation--the employer should select the student for the job, not the coordinator.

In working out the training agreement, the coordinator must have clearly in mind the standards pertaining to hours and wages which have been set up in his state and by local advisory committee. On employment of ICT students, it is desirable that provisions be made for wage adjustments upon satisfactory progress.

One of the chief virtues of ICT is the fact that the training--both practical and related--is centered around an organized plan. The training plan for each student must be worked out by the coordinator and employer before the student begins work or immediately after placement. The plan must contain a list of work experiences to be provided by the employer and an outline of related study assignments. It must be approved by the Advisory Committee and State Supervisor of Trade and Industrial Education before the student is considered a bona fide T & I student.

Training plans are usually prepared in triplicate, one copy for school files, one copy for state files, and one copy for the employer.

In preparing the schedule of work experiences, the three most satisfactory methods are:

1. Jobs listed in order of difficulty, from the easiest to most difficult. (automobile body repair, meat cutting, etc.)
2. According to type of work done or machines and tools used. (printing, auto mechanics, etc.)
3. According to a "production order." (sheetmetal work, carpentry, etc.)

The course of study is prepared by the coordinator--with possible suggestions from the employer--and should consist of topics or subjects of information related to and paralleling the work experiences listed in the first column. In general, the informational topics listed concern:

1. Tools and equipment
2. Materials
3. Related math, science, and drawing
4. Operating principles and processes

Some system of recording work experience should be provided to show the type and frequency of work experience and whether it was done under close supervision or on his own. This record should be checked frequently by the coordinator to insure the student is receiving training in all phases of the occupation.

A similar record should be kept of related study assignments. This enables the coordinator to determine how closely the work experiences and related studies are correlated and where additional lesson assignments should be made.

Standards for Operation

A. Classroom Facilities

A regular classroom preferably should contain study tables and chairs, bookcases, file cabinet, bulletin board, and blackboard. There should be, also, an adequate supply of instructional material consisting of current reference books, manufacturing literature, trade manuals, bulletins, trade magazines, occupational study guides, and the like, for each occupation in which training is offered. In addition to occupational material, the library should contain material on economics, basic science, human relations, safety, etc., which may be used as references for class discussions on topics of common interest to all class members.

B. Related Subjects Class

The objectives of related study class are:

1. To provide technical information directly related to the daily work experience of the student
 2. To provide a background of technical and auxiliary information that will enable the student-learner to advance beyond mediocrity
 3. To create desirable attitudes toward work, school, and society
- To develop latent leadership abilities of the students

A minimum of sixty minutes per day should be scheduled for related study. It is preferable to schedule first- and second-year students at different periods. In some programs, one group of students will work during the morning and attend classes in the afternoon. This would require one related study class in the morning and one in the afternoon. In my opinion, this is not a desirable arrangement unless it is impossible to obtain enough suitable training stations for afternoon employment.

The recommended pattern is to schedule supervised study three periods each week and two periods of group discussions, films, etc., each week. This schedule will vary for first-year students and second-year students as well as during the year.

Study guides should be loose-leaf so that appropriate related study assignments can be pulled out of the guide and assignments correlated with work he is doing on the job each week. Supervised study plan using individual assignments has many advantages over correspondence courses. It provides more flexibility and permits immediate checking and grading of student's written work. Students may be permitted the freedom of selecting the particular lesson they want to study each day. Written assignments must be graded promptly and records made of completion and the grade. If assignments are not completed satisfactorily, they should be repeated.

C. Records and Reports

Each state should require a class organization report within two weeks after opening date of the semester. This report will show:

1. City and school
2. Time of day-related Class Meetings
3. Starting date
4. Closing date
5. Length of course
6. Name of teacher-coordinator
7. Name of student, grade, age, employer, and occupation
8. Name of members of advisory committee and the organization they represent

A closing report should be submitted within two weeks after the close of the semester. This report will show:

1. Date closed
2. Students in class when report is made
3. Total hours each student was on job or in class
4. Students enrolled since organization report and same information on students as contained in the organization report.
5. Total cumulative enrollment

6. Total hours class met
7. Number of calls on parents
8. Number of contacts with employers
9. Total hours spent in coordination
10. Number of advisory committee meetings
11. Number of meetings with employer and employee organizations
12. Total hours of teaching and coordination

These reports are necessary to provide the state with statistical information for reporting to the Office of Education and also to provide data for issuance of Occupational Training Certificates.

Student permanent record cards should be maintained for the school files.

D. Coordination Activities

Coordination activities include the following:

1. Placement
2. Follow-up on graduates
3. Contacts with employers
4. Assist in making job analyses
5. Preparation of courses of study
6. Conferences with students
7. Contacts with members of advisory committee
8. Check on rotation of student on the job
9. Contacts with employers, labor organizations, and school administrators regarding the over-all program

The objective of coordination is to correlate all the helpful agencies and factors that contribute to the training of students. Coordination involves more than visiting the training station to check if the student reported to work or drinking coffee with business men.

Coordinators must plan or budget their time in order to carry out their multitude of responsibilities. A coordinator should plan a weekly schedule. Each afternoon, visits should be planned. He should plan where he will visit, the object of the visit, and what material to take

with him. A coordinator should not adopt a set pattern in visiting training stations. Care should be taken that favorite employers are not visited more often than others. A copy of the coordinator's daily itinerary should be left in the school office before leaving the building. Of course, it is impossible to adhere to planned itinerary strictly, but it does give school officials some idea where he might be contacted if necessary. If the itinerary has to be changed, a telephone call to the office may be necessary.

A coordinator should go about his visitation in a business-like manner. As a rule, the coordinator should first contact the manager or foreman upon entering a training station. Short, routine visits should be made once a week to see if the student is on the job, to observe the type of work he is doing, and to give the employer an opportunity to discuss any specific problems. Periodic conferences should be held with the employer to review student's progress and recommendations for related study assignments. Employers should be asked to complete an "Employers Periodic Rating" form as often as it is felt necessary. Coordinators should be alert to detect changes in student's attitude toward his work and initiate corrective action before undesirable situations arise.

There are several rules of conduct which the coordinator should observe while visiting training stations. These rules can best be given in the following "Do" and "Don't" lists:

DO

1. Be alert. Observe what is going on without appearing to "snoop."
2. Be friendly with everyone without fraternizing with them.
3. Show an interest in the work in progress. Be curious; ask questions if the opportunity presents itself.
4. Take notes (after leaving) on items which may be used for a conference with the student or for study assignments.
5. Be quick to sense the employer's desire to terminate a conference.

DON'T

1. Don't call attention to errors, bad practices, unsafe conditions, and the like while visiting the student. Do so in private conference.
2. Don't try to demonstrate to a student how to do a job which he is assigned.
3. Don't pose as an expert or authority on any matter concerning the work going on.

4. Don't request a conference with the employer when he is obviously busy.
5. Don't engage in so-called "friendly" arguments on controversial questions.
6. Don't interrupt or interfere with the student's work.
7. Don't let a visit degenerate into a "bull session" with the employer or employees.
8. Don't appear to be loafing or just "passing the time."
9. Don't handle tools, machines, or equipment unless invited to do so.

Coordinators should maintain a diary or record of their daily coordination activities. This diary will include notes, comments, and other pertinent information obtained during visits to training stations. These notes will be of assistance in preparing final reports, correlation of related study with OJT, and in planning follow-up visits and weekly schedules for coordination activities.

There are many other important facets of an ICT program that it was impossible to cover in the short time I have had to talk with you. Perhaps these can be covered during the question and answer period.

SOME QUESTIONS THAT NEED TO BE ANSWERED ABOUT THE TRAINING OF COORDINATORS

Jeffrey R. Stewart, Jr.

The first of the six questions which I shall discuss is, who should train the coordinator? As I see it, three groups should accept responsibility for training coordinators:

1. Teacher-educators
2. State and local supervisors
3. Experienced coordinators who are presently employed as such

In my opinion, the teacher-educators are best qualified to prepare coordinators for the related instruction phase of the program; the state and local supervisors are best qualified to prepare coordinators for the cooperative work training phase of the program; and experienced working coordinators are best qualified to prepare coordinators for the local operating procedures and problems.

No one of the three groups should try to train coordinators--they should all work together--each contributing from his expertise, teaching what he knows best. The structure for the training might be as follows:

Teacher educators--primarily concentrating on pre-service training on the related instruction curriculum, teaching methods, skills, and knowledges in occupations, vocational guidance in undergraduate classes, student teaching, and work experience supervision--and in graduate classes, short courses and workshops.

State and local supervisors--primarily concentrating on in-service training on the cooperative work training phase of the program, the planning of visits, preparation of reports, provision for equipment, program evaluation, and other special coordination activities--through workshops and summer conferences, publication of guidelines, and on-the-job visits to new and experienced coordinators.

Experienced coordinators--will be of invaluable assistance in introducing prospective coordinators to the program and in helping new coordinators in their schools get off to a good start--by acting as consultants at conferences and workshops, sponsoring new coordinators in their local area, and assisting the state staff in the formulation of written procedures and case problems which need solution.

What is the nature of the work experience that the coordinator should have? Is time employed the main criteria? Is a year's experience on one job really that, or is it one week's experience repeated fifty times? Are there any satisfactory substitutes for work experience as we presently know it? For example, would a program of planned in-depth business and industrial visitations in many businesses and industries give the prospective coordinator as valuable an experience as employment which may be

long but limited in scope? Assuming that a coordinator should have prior teaching experience, should the work experience come before or after he starts teaching?

How many students can one coordinator coordinate? The answer to this question will have an effect on how coordinators are trained. In my opinion, the coordinator is primarily a teacher rather than a program administrator. Therefore, he should not have so many students that he has little time to spend with each on the job. I do not see how a coordinator with forty or fifty students can be much more than an administrator of a work experience program.

How often should the coordinator visit the student on the job? How long should the coordinator stay with the student on the job during one of these visits? In my opinion, the most important duty of the coordinator other than his classroom teaching is on-the-job visitation. Because the student receives school credit for his work, in addition to pay, he should receive a good deal of attention from the school while he is on the job. At least half of the coordinator's so-called released time should be spent in making on-the-job visitations to students and their supervisors or employers. Visits should be planned so that specific points are checked. Visits of forty to sixty minutes in duration can be justified if the teacher has properly thought out points to be checked. Longer visits can also reduce program costs if figured on an hourly basis.

How should the coordinator allocate his time during a visitation? About half of the time is normally spent with the supervisor and half with the student, although I expect that as we obtain more information as to the value of these visits, we will find that the coordinator should spend a larger proportion of his time with the student--maybe two-thirds. Of course, part of the time will be spent in conference with the student and employer together.

What can be done to make the coordinator more efficient in terms of accomplishing his duties on a priority basis according to his major responsibilities? The coordinator who spends the whole month of April planning his employer-employee banquet, for example, is inefficient, to say the least, in terms of his major responsibilities. Do we need to make some cost studies to determine the relative efficiency of various programs, and pass this cost information along to the coordinator-trainee for his consideration? (This information would also be valuable to supervisors, administrators, and others.)

Sixteen cooperative programs which I have recently studied, for example, cost the taxpayers, in coordinator salaries alone, \$62,400 more than the cost of traditional classroom programs for nine months. Is this extra salary money being spent wisely and on the most important activities? These sixteen programs enrolled from fifteen to thirty-four students each. The coordinator's salary cost per student for the three hundred thirty-one students averaged \$188.52 for the nine months--ranging from \$114 per student in the largest program to \$260 per student in the smallest. These salary costs are only for coordination salary and do not include costs of related instruction, equipment, transportation, etc.

The mean number of on-the-job visits per student per year for the sixteen programs studied was 7.5. The range was thirteen to as few as five. Total yearly visits ranged from a high of three hundred forty to a low of eighty-eight.

The average salary cost per visit is difficult to arrive at, but estimates can be made by assuming that 30% of the coordinator's salary is for on-the-job visitation. With this assumption, the average coordinator salary cost per visit for the sixteen schools studied was \$12.57. Because some coordinators visited their students more frequently than others, however, the salary cost per visit ranged from a low of \$5.74 to a high of \$22.16.

The duration of the visits for the sixteen coordinators in this study averaged .45 hours, or twenty-seven minutes. Visit duration averages by school ranged from a low of fifteen minutes to a high of forty minutes. Again, this range is an indication that coordinator-trainees need guidelines. Yearly total on-the-job visit hours ranged from a high of 112.2 to a low of only twenty-nine hours on the job with students for an entire school year.

For the sixteen schools, the yearly total hours a student or his employer saw the coordinator on the job averaged 3.4 hours. The range was from a high of 6.5 to a low of 1.3.

The average salary cost per visit hour for the sixteen schools was \$27.72. The hourly cost ranged from a low of \$17.38 to an hourly coordinator salary cost of \$67.71. I remind you that these figures are based on the assumption that 30% of total coordinator salary is for visitation.

The salary cost for all students in a school's program to see the teacher on the job for one hour ranged from a low of \$300 to a high of \$1,500. This great range is caused by three variables--number of students, number of visits, and length of visits. The average for the sixteen schools was \$573.

I believe that if the prospective coordinator is aware of the costs of operating a cooperative program and that he can in fact lower unit costs by making more frequent and perhaps more lengthy visits, he will attempt to do so. He will give priority to the important coordination activity of on-the-job visitation.

I predict that in the near future it will not be uncommon for school administrators and evaluators to make cost studies of various programs. Let's protect ourselves now and know what the answers are before we are asked. And let's see to it that the coordinators we train are cost conscious.

School	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
A	34	\$1,950	\$57.35	10.0	\$5.74	.33	11.2	340	112.2	3.3	\$17.38	\$590.92
B	34	1,950	57.35	5.0	11.47	.25	8.5	170	42.5	1.3	44.12	1,500.08
C	26	1,950	75.00	8.0	9.38	.45	11.7	208	93.6	3.6	20.83	541.58
D	26	1,950	75.00	6.0	12.50	.67	17.4	156	104.5	4.0	18.75	487.50
E	26	1,950	75.00	6.0	12.50	.50	13.0	156	78.0	3.0	25.00	650.00
F	23	1,950	84.78	9.0	9.42	.45	10.4	207	93.2	4.0	21.20	487.60
G	18	1,950	108.33	10.0	10.83	.33	5.9	180	59.4	3.3	32.83	590.94
H	18	1,950	108.33	6.0	18.06	.29	5.2	108	31.3	1.7	63.72	1,146.96
I	17	1,950	114.70	6.0	19.12	.63	10.7	102	64.3	3.8	30.18	513.06
J	16	1,950	121.87	8.0	15.23	.63	10.1	128	80.6	5.0	24.37	389.92
K	16	1,950	121.87	6.5	18.75	.63	10.1	104	65.5	4.1	29.72	475.52
L	16	1,950	121.87	6.0	20.31	.50	8.0	96	48.0	3.0	40.62	649.92
M	16	1,950	121.87	5.5	22.16	.33	5.3	88	29.0	1.8	67.71	1,083.36
N	15	1,950	130.00	13.0	10.00	.50	7.5	195	97.5	6.5	20.00	300.00
O	15	1,950	130.00	8.5	15.29	.50	7.5	128	64.0	4.3	30.23	453.45
P	15	1,950	130.00	8.0	16.25	.45	6.8	120	54.0	3.6	36.11	541.65
Total	331	31,200	94.26	7.5	12.57	.45	149.3	2,486	1,117.6	3.4	27.72	573.52
			Mean	Mean	Mean	Mean	Total	Total	Total	Mean	Mean	Mean

VII--One visit to all students takes ? hours
 VIII--Total yearly visits
 IX--Yearly total on-job visit hours--teacher
 X--Yearly total hrs. student or employer sees teacher on job
 XI--Average salary cost per visit hour
 XII--Salary cost for all students to see teacher on job one hour

Total coordination salary cost - \$62,400
 Total coordination salary cost per student - \$188.52
 *50% of reimbursed portion of salary (60% reimbursement) at average annual salary of \$6,500

All means are weighted means

VOCATIONAL INTEGRITY IN COOPERATIVE EDUCATION

Mary V. Marks

I appreciate this opportunity to have a part in this high priority leadership seminar on cooperative education. There were others in the Division of Vocational and Technical Education of the U. S. Office of Education who would have considered themselves fortunate to be with you also. I bring you their greetings and their assurances that the guidelines you develop from this seminar are awaited with anticipation.

In reviewing the program format for this week and the topics which outstanding speakers would discuss, it seemed to me that my efforts today appropriately might be directed toward pulling together and putting into a different perspective some of the ideas already expressed. My thoughts have turned, therefore, to certain basic beliefs which it would be my hope could motivate whatever involvement each of us might have with cooperative education.

Recently I heard Harold Howe II, our Commissioner of Education, speak on the subject of "Great Expectations." He pointed out that news about the educational establishment used to be found, perhaps even 98% of it, on the sports pages; whereas now education is front-page news. Public interest has been whetted by social and technological changes. Legislative programs have created new resources and challenges which promise to have far-reaching impact on the lives of all our people. But, he cautioned, let us not forget that great expectations also carry with them disappointments and frustrations. Ours is the task to minimize these possibilities.

For example, let's not go overboard on cooperative education to the point of weakening other ways of providing vocational education. Let's not label all "work experience" programs for our young people "cooperative education" just because they are school-approved. Some have vocational guidance purposes; others are wage-producing or cultural enrichment programs. The point I want to make is that we must raise no false hopes; we must serve well the great expectations characteristic of cooperative education.

I have, therefore, elected to talk with you about "Vocational Integrity in Cooperative Education." Our frame of reference is Part A, Section I of the Vocational Education Act of 1963. This includes the Declaration of Purpose which states its intent as making available vocational training or retraining which is of "high quality . . . realistic in the light of actual or anticipated opportunities for gainful employment," and is "suited to (the) needs, interests, and ability" of those enrolled to benefit from such training. My remarks will deal with cooperative education as it relates to the people involved and to instruction.

First, let us look at cooperative education as a program requiring the participation of three groups--students, employers, and teacher-coordinators.

Students

Students enroll in a vocational education program in order to develop competencies needed to enter, gain satisfactions, and build a successful career in a specific occupational field. Each has an occupational objective which develops and matures during the course of his training program. This objective is a key element in his motivation and in his acceptance of himself as a worker and contributing member of society. No matter how tentative or how committed the student's occupational objectives may be, it nevertheless is an essential condition for his preparation for employment.

The vocational integrity of cooperative education is irrevocably linked to the occupational objective of each student. The trainee must be able to see the connection between his employment situation and the vocational goal he has set for himself. In his training station he must find the opportunity to measure himself against the initial demands of his vocational choice and to feel the satisfactions inherent in progress toward a goal. While being a productive part-time employee for his training agency, he must never be permitted to lose sight of his trainee status and the level of employment qualifications he is expected to achieve at this stage of his vocational development.

Hopefully, this will be a happy and successful experience leading to full-time employment, perhaps with his cooperative employer. Or, an equally acceptable result would be the pursuit of further formal training in order to meet requirements for jobs at a more complex level of responsibility in the field of his occupational objective.

One of the key elements of cooperative education then is the selection of training stations according to students' occupational goals and abilities. The fact that a student already has an after-school job does not automatically make that job appropriate to his occupational purposes. His cooperative employment must first be a bona fide part of his vocational education. After that criterion has been met and accepted, a student's other motivations--such as payments on a motor scooter, cash for dates, financial help to his family, or tuition fees--may be considered. Any compromise with this standard that might be approved by the school should be made only with the complete awareness of the student concerned that cooperative education for him will be somewhat less than realistic and not suitable to his goal.

Employers

The role accepted by employers in cooperative education has a significant influence on the vocational integrity of the program. Employers who join with the schools in providing training stations for cooperative students become in effect "downtown" members of the school faculty. They agree to assume some teaching responsibilities and to guide trainees through a sequence of learning activities related to their employment and occupational goals. A key factor here is the understanding and approval of the top decision-makers in the business or industry and, where appropriate, the support of the craft or industry

union or other organization representing employees. Without this type of partnership, arrangements made for a joint training endeavor can be weakened or even abrogated to the detriment of individual students and vocational education.

The usual procedure is for management to delegate to experienced members of their organization responsibility for the implementation of the training agreement with the schools. Clear authority as well as responsibility is needed to encourage these individuals to develop relationships with the school and with trainees that will be mutually productive--that is to say, relationships which will simultaneously promote the objectives of the employer, the learner-employee, and the school.

Usually employers name experienced employees as training sponsors--those who have demonstrated their ability to give leadership to other workers. However, in some cases, the person designated feels inadequate in his new assignment. This is a serious impediment to desired standards for cooperative education. Experience has shown us that training sponsors will be effective as "downtown teachers" to the degree that they have the ability to train and to supervise.

There is in operation in some states what has been called the "Sponsor Development Program." It ties in with the regular supplementary adult education offerings. Employers refer their training sponsors to a series of classes conducted by teacher-coordinators. The principles and techniques of what many of us know as JRT (Job Relations Training) and JIT (Job Instruction Training) are explored in terms of the purposes of cooperative education. In addition, monthly breakfast meetings are sometimes scheduled so that successes and problems may be aired and sponsor skills recognized and strengthened. This planned program for training sponsors seems to be a technique deserving of further study and evaluation.

Teacher-Coordinators

The teacher-coordinator is the controlling figure in high-quality cooperative education. We have already felt his presence in our discussion of the student's occupational expectations and the employing agency's relationship to the school. Probably more than anything else, the competency and dedication of teacher-coordinators make the difference between success or failure of cooperative education.

First, however, they must enjoy the confidence of school administrators who have a firm commitment to the educational values derived from a school-work program of study. This support is essential. It establishes a climate conducive to program acceptance in the school and in the community. It upholds the need for a teaching load compatible with the time requirements for coordination. It gives teacher-coordinators flexibility of operation while working within the administrative, philosophical, and organizational structure of public education. An administrator's endorsement of cooperative education, and the public backing he gives his teacher-coordinators are essential to the vocational integrity of the program in his school system.

Teacher-coordinators represent the school administration and the quality of the total educational program as they seek to bring into harmony the economic and educational goals of the community. They are "front and center stage" by the very nature and extent of the coordination activities they undertake. As an example of their dominance in relation to the vocational integrity of cooperative education, let us look at coordination as an operational procedure. These activities include:

1. Analyzing "actual or anticipated opportunities for gainful employment" upon completion of training;
2. Surveying business establishments representative of these opportunities in terms of the objectives of prospective students;
3. Creating opportunities for all economic enterprises to be considered for selection as cooperating training stations for respective occupational programs;
4. Referring students to employers of a size, philosophy of operation and location that is suited to each student's needs, interest, and ability to benefit from such an association;
5. Getting agreement on hours and continuity of employment, wages, placement, planned training experiences, working records and reports, and evaluation procedures;
6. Gaining approval of parents or guardians, counselors, school administrators, and the local advisory committee; and
7. Explaining to each student, employment forms, transportation, required records, and personal standards set by the school.

Each of these activities is an aspect of coordination which contributes to the values of cooperative education. For education--the teacher-coordinator will have built an environment in which optimum opportunities for learning in a job situation will be available for each student. For the economy--the teacher-coordinator will have provided employers and their employees with opportunities to benefit from participation in personnel and job-development experiences. Here, indeed, is evidence of vocational integrity in cooperative education.

Here, also, is evidence that the preparation and appointment of individuals as teacher-coordinators is no casual process. Teachers in cooperative programs must be able to look forward with real liking to off-campus, out-of-the-school-building educational responsibilities. When "making calls" in the business community, they must feel sure of their knowledge and experience in the occupational field they represent, and they must feel comfortable in inter-personal situations requiring natural business social skills. Both pre-service and in-service teacher education should provide opportunities for teacher-coordinators to

gain, renew, and enrich their capacities for effective relationships in the business community. For example, to my knowledge, in only a few states is provision made for the renewal at specified intervals of teacher-coordinators' occupational experiences. In only some occupational fields is there opportunity within pre-service teacher education for directed work experience, organized and supervised to the same degree as student teaching or the teaching internship. In only some in-service teacher education programs is subject matter course work offered in addition to professional courses in the improvement of instructional techniques.

It may be that administrators at state and local levels will wish to explore among others these means of securing and maintaining a staff realistically competent for their day-to-day activities in cooperative education programs.

From this brief overview of the expectations and needs of individuals intimately associated with cooperative education, let us now approach our topic as it relates to instruction. Study of the Rules and Regulations for the Administration of Vocational Education will show that rather specific standards have been delineated in order to assure the soundness and quality of vocational education. Sections 104.13 and 104.16 specify that:

1. The program of instruction will include a planned logical sequence of those essentials of education or experience (or both) deemed necessary for the individual to meet his occupational objective.
2. The program of instruction will include the most up-to-date knowledge and skills necessary for competencies required in the occupation or occupational field in which the individual is being prepared.
3. Cooperative programs are for persons enrolled in school who will receive vocational instruction in the classroom and an organized program of training on the job.

It is evident from these references that both subject matter and methodology must be visible in cooperative education programs. May I be permitted to observe also that cooperative education is school-centered; it is not merely an employment program, or an uncoordinated work-experience program.

Identification of Subject Matter

Decisions concerning subject matter to be included in a course of study can be made quite apart from the selection of learning activities that will make the subject matter meaningful to individual students. The objectives of the curriculum and of the students and the level of achievement to be required provide the bases for topics, units, and courses. The procedure for curriculum analysis is familiar to all

vocational educators and applies no matter what organizational plan is used for scheduling instruction.

In cooperative education, however, there is the added dimension of determining what is best taught in the classroom and what can be presented or discovered more effectively at the cooperative training station. This determination involves several considerations. Not the least of these is the influence representative and thoughtful employers exert on the total school curriculum. If employers have already helped to build into the local educational system or the institution a commitment to the non-college bound student, their companies may be expected to instruct in subject-matter areas which go beyond immediate job performance. However, we know such situations would be the exception at the present stage of employer involvement in cooperative education.

Perhaps it would be pertinent in the light of our goal of vocational integrity to plan according to one of the management techniques of the Program Evaluation and Review Technique network. You will recall that this system uses three time values for each activity: optimistic, most likely, and pessimistic times. To paraphrase, we might say that the extent of subject-matter emphases we might expect training sponsors to handle for the school could be estimated as optimistic, most likely, and very minimum (or pessimistic). Such a scale would give us a realistic basis for determining the knowledge and skills to be taught in the classroom exclusively or in both the classroom and the training station.

A second consideration in the area of subject matter involves breadth of preparation. The pace of obsolescence is such that vocational educators must appraise teaching content in light of the flexibility it will give students in adjusting to change. For example, principles and theory underlying occupational requirements are needed that permit transferability to new situations. Also, it must be recognized that there are limitations to breadth of background present when subject matter is to be learned in the training station. An employer will transmit only information that has been shaped by his experiences with the practices, equipment, and policies of his particular organization. This information may be of high quality, but, nonetheless, it represents only a small "sample of the population."

A third important factor in safeguarding vocational intent in the selection of instructional content is concerned with the contribution of other subject-matter areas, both vocational and general to the purposes of the curriculum. I will mention this aspect only briefly since the concept is not unique to cooperative education programs. Those experienced in distributive, industrial, health, agricultural, and office cooperative programs have established the pattern of drawing on business enterprises to strengthen the vocational integrity of occupational preparation. Their leadership is needed to identify new relationships in the school program that also will strengthen curriculums for students preparing to enter and to succeed in employment.

The Cooperative Method

Earlier in our discussion of the expectations of people involved in cooperative education, we spoke of the operational aspects of coordination. There are also aspects of coordination which are rightly considered as methodology. We find it appropriate therefore to refer to the coordination of learning activities as the "cooperative method of instruction." This concept describes a key element in vocational integrity.

Use of the cooperative method assures that each training station will be viewed as a learning laboratory in which desired behavioral outcomes may be developed. The team composed of teacher-coordinator, training sponsor, and student-trainee plans together so that the educational values in specific job experiences will be perceptible. In other words, insofar as is practical, the focus of on-the-job tasks is on training purposes rather than on the number or variety of tasks that are performed by a paid employee.

Skillful use of the cooperative method by the teacher-coordinator also creates interaction between the substance of classroom instruction and activities in the job situation. For example, training calendars may be used by the teacher-coordinator to keep the training sponsor abreast of units of instruction or individualized study assignments completed at school. This coordination reinforces the structure of training agreements and may open opportunities for additional job training experiences that are especially timely for the student-trainee. Conversely, current or anticipated job experiences that require new knowledge or skills may be introduced in the classroom where practice, discussion, or independent study may be used to supplement training given by the employer.

Visualize, also, if you will, how the concept of the cooperative method encourages teacher-coordinators to develop with each student an understanding of relationships and opportunities inherent in the field of his career objective. Requirements for success in the training job may be compared to the movement generated by a pebble tossed into water. Just as the circle of ripples widens and touches a larger area, so the various functions performed in the business enterprise become evident to the student. Finally, at the outer edge of the circle, he begins to understand how the job he is now doing affects his firm's relationship to the local or state economy. Here is a liberalizing experience that may be enjoyed with benefit to each student throughout his working life.

Another advantage of the concept of the "cooperative method" is that it provides a basis for the evaluation of learning in the classroom and in the training station. Cooperative education programs are constantly in the public view and may be justified only to the degree that they demonstrate sound educational results. Training profiles and similar rating devices attempt to measure progress in the training station. Yet, too frequently these only include questions related to personality and manual skills. Appropriate use of the cooperative method requires that progress reports reflect the student's ability to apply subject-matter theory in reaching planned outcomes. Rating forms stress

evidences of understanding, appreciations, and satisfactions as well as immediate job skills, and job attitudes.

Finally, let me share with you a challenging idea which has been put forth by Dr. Grant Venn, Associate Commissioner, Bureau of Adult and Vocational Education. It fits neatly into the concept of the cooperative method and the vocational integrity of cooperative education. Dr. Venn has asked his staff to explore ways and means of building into the mainstream of the public education endeavor a concern for learning how to enter college. He suggests that schools assume responsibility for assisting all high school students to find employment during high school and when they leave school.

What better place is there to start than with those who have completed or left cooperative education programs? What better source of evaluation of the vocational integrity of our programs can we have than the placement and follow-up of those we have trained?

Our analysis of vocational integrity began with some observations concerning career objectives and the purposes of vocational instruction. We have looked at some basic beliefs about cooperative education, its effects on the people involved, and its use in providing instruction that is of high quality, realistic in the light of actual or anticipated opportunities for gainful employment, and suited to the needs, interests, and ability of those enrolled.

If what has been presented has sparked just one new idea for each of us, my goal will have been met. Great expectations abound! Challenging opportunities abound! In this dynamic environment, the vocational integrity of cooperative education must be clearly visible in the school and in the community. Guidelines for implementing cooperative education programs, in my opinion, must reflect this commitment. At the same time we should stay clear of innovation inertia. As Ethel Barrymore put it, "It's what you learn after you know it all that counts!"

ELEMENTS COMMON TO ALL COOPERATIVE PROGRAMS

Hugh M. Stephenson

It is a pleasure being here today and addressing the National Seminar on Cooperative Education. Having been asked to speak on the last day of the Seminar presents two challenges. As this is the last day of the program, it may require more skill on my part to hold your undivided attention. On the other hand, I may be in a more favorable position to make a lasting impression. You will have to judge how well I fare.

National Cash Register has had a continuing and strong interest in cooperative education. This interest was demonstrated initially through the leadership of John H. Patterson who was instrumental in establishing vocational cooperative education in the Dayton area. Mr. Patterson headed a committee of interested citizens including Colonel Deeds and Charles Kettering. The committee approached the Dayton Board of Education in 1913 to consider adoption of the work-study approach to vocational education. The then-superintendent of schools, Edwin J. Brown, agreed to give the approach an opportunity to prove its merit. The program was established in the fall of 1914 with a group of forty boys employed on a full-time basis and attending school four hours a week. From this modest beginning has grown the present day John H. Patterson Cooperative High School with a student body of 1,173. With this heritage, I am particularly pleased to present the current NCR high school cooperative program.

To cover the topic effectively, "Elements Common to all Cooperative Programs," I have organized my discussion into the following areas:

1. First, a statement of the NCR Philosophy of Cooperative Education.
2. Description of the program including the principle elements of selection, placement, job adjustment and counseling, and full-time placement upon graduation.

In closing, I would like to make some observations of an evaluative nature concerning the current program and take a brief look at some of our future plans.

Before discussing the NCR High School Cooperative Program, let me give you some brief data concerning its dimensions. There are one hundred eight cooperative students participating. This total figure represents fifty-seven juniors and fifty-one seniors. There are seventy-four female students and thirty-four male students. You might be interested to know that in addition to the one hundred eight cooperative students, we have fifty associate level co-ops, thirty-six bachelor level co-ops, as well as a Graduate Industrial Fellowship Plan which is basically a cooperative program for a Master's Degree in Engineering Science. This is a small program, and there are usually one or two individuals participating.

The coordination of the High School Cooperative Program is accomplished with one full-time administrator who is also accountable for apprentice training. This combined accountability seems appropriate in view of the number of co-ops who enter apprenticeship.

NCR Philosophy of Cooperative Education

To provide a meaningful perspective to a discussion of the NCR High School Program, it is important if only in succinct terms to state our philosophy of cooperative education. It has been said that successful teaching turns upon the recognition both in thought and action that learning is essentially a meaningful rather than a mechanical process. In the field of vocational education, the complementary nature of the work-study relationship permits the student the experience of applying knowledge and skill from the classroom to a "live-job" in a business environment. When the work experience is properly related to the students' academic program, there is mutual reinforcement. The student not only learns "about a subject," but also blends knowledge into competent practice.

A meaningful side-effect of the work-study approach is that fact that the student can make a more informed judgment about his career based on his industrial experience.

The simplicity of the concept of a sound cooperative program may create a deceptive impression as to the ease of conducting a viable program. Like most worthwhile endeavors, a good cooperative program must be worked at on a continuing basis.

Selection Process

The initial step in the selection process is taken when the NCR co-op program administrator contacts the Patterson High School coordinators in February of each year to discuss the requirements for new cooperative students to replace graduating seniors in August. In recent years, the number of replacements has ranged between fifty and sixty.

Arrangements are made for the students to visit NCR as a second step in the selection process. This step which constitutes preliminary screening includes a battery of tests and at the same time an interview by Mr. Paul Wiesmann, the NCR Cooperative Program Administrator. This is accomplished during the months of March and April.

Let's look briefly in more detail at the testing program. There are two test batteries utilized. A battery of clerical tests is given to all students in accounting and office education. The factory battery is given to all students in drafting, electrical, industrial electronics, machining trades, printing, and sheet metal and air-conditioning.

The clerical battery, as you will note on slide three, includes aptitude, achievement, and skill tests. The first test is an intelligence test which is similar to the Otis or Wonderlic. The second test

is called Office Work Ability and is a differential clerical test with six sub-sections.

The sections are:

1. Vocabulary
2. Arithmetic Reasoning
3. Spelling
4. Arithmetic Computation
5. Checking
6. Posting

In addition, typing and shorthand skill tests are administered.

The factory battery is made up of six separate tests. They include the same intelligence test included in the office battery, a practical intelligence test which is a non-verbal test, the space form thinking test which is a special relations test, finger dexterity test, a two-hand dexterity test, and arithmetic computation.

Following completion of the appropriate test battery, each student is interviewed by Mr. Wiesmann. The purpose of this preliminary interview is to determine the following:

- A. The student's attitude and expectations concerning work experience.
- B. The nature of any previously related experience.
- C. Attitude toward achievement level in school.

The interview information is evaluated in light of the student's academic performance, school recommendations, and test results.

The third step in the selection process is the placement interview. Those co-op students who have met NCR employment standards are contacted for a final interview. The Employment Department, based on the information generated in step two, refers the cooperative student to those departments where openings exist which are compatible with the student's school program and interests. The manager of the department interviews the student for the purpose of describing the job and its duties as well as assessing whether or not the student would have a profitable experience. When possible, the junior cooperative student starts to work so that there is an overlap with the senior cooperative student to provide for an appropriate training period.

Now that we have the student on the job, let us look at the type of departments and the nature of assignments which are given these students.

Placement

High school cooperative students are placed in twenty-three departments throughout NCR Divisions located in Dayton. These divisions include Financial, Research and Development, Manufacturing, International, Marketing, and Industrial Relations.

In recent years, the male students, in general, have not been as effectively placed as female students. This winter and spring we have conducted an assessment study in which principle emphasis was directed toward improved placement of males for this coming academic year.

Slide five shows the placement of cooperative students throughout the Company at Dayton as it will occur this fall. The chart is organized by major vocational divisions in which the students are enrolled at Patterson High School. Within this major breakout are noted the departments in which the students are placed. On the right side are the types of assignments given the cooperative student.

Job Adjustment and Counseling

As a result of conversation with cooperative high school students, certain patterns seem to emerge concerning their attitude toward the work-study approach. Their comments run something like this:

1. Other kids have no idea what a job is all about.
2. If we had the opportunity, we would go through the cooperative program again.
3. You learn how to act and talk around adults. (One young lady reluctantly admitted that when she first started on the job she had difficulty communicating with another generation. Her "jargon" lost something in translation.)
4. Being able to observe as well as perform different jobs helps one decide what to do after graduation.
5. Occasionally you hear the comment "people are afraid to give you something more difficult to do. You have to show them that you can do it."
6. The teachers treat you more like an adult in the cooperative program. You have to measure up.
7. When you begin the program, the two-week alternating schedule is a little difficult to adjust to. After a few months you get in to the swing of it. It is interesting because there is a change every two weeks.

These are but a few of the representative remarks that express in a very real sense their basic attitudes toward the experience of cooperative education.

The Work Session Performance Review is a formal input to counseling the student. This rating form is completed each six months' period. Record of the student's achievement is the basis of counseling from the vantage point of both the department management and the student's co-ordinator. I would like to comment that with the group as large as ours (one hundred eight), we have very few serious counseling problems. In no small part, I am confident that this is due to the excellent efforts of the Patterson Cooperative faculty, particularly the co-ordinators, to prepare effectively the student for the work experience segment of their education.

Full-time Placement

In developing the information for the talk today, we compiled a listing of graduates for the last twenty-six years. To our surprise, there were one thousand fifty-two graduates during this period. It has been our experience in recent years to employ 70% to 80% of the graduating seniors. From this group, a significant number have gone into apprenticeships in such areas as Toolmaking, Tool Designing, Machining, Patternmaking, and Modelmaking.

It is not uncommon to have a graduate of Patterson as a secretary in our Executive Office. The graduates have proven by their performance the merit of vocational cooperative education.

The Evaluative Comments and Future Plans

In reflecting on the over-all performance of the High School Cooperative Plan, it is my judgment that it is an effective program. Furthermore, it has been a worthwhile and meaningful relationship among the interested parties--the cooperative student, the school, and the Company. As I mentioned earlier, we have recently completed an assessment study. Our chief area of concern had been with the placement of male co-op students. With the realignment of placements planned for this fall, this aspect of the program should be greatly improved.

You may feel my over-all evaluation of the program is biased. However, what I have not told you is that I have assumed accountability for the program as recently as last October. The present High School Cooperative Program was developed under the guidance of Mr. Robert E. Kline, who was director of Educational-Training until October of last year at which time he was made Special Assistant to the Vice President of Industrial Relations. At that time, my former department, Research and Development Personnel Services, was merged with the Educational-Training Department to form Manpower & Organization Development.

Within the Research and Development Division I have had continuing accountability for scientific and engineering university cooperative programs. From this experience have been generated a number of ideas

for potential future application to our High School Program. Let me identify a few of these ideas:

1. University students are asked twice each year to discuss before other students in their section in fifteen or twenty minutes their assignments during this period emphasizing how their experience relates to their course of study. This exercise has proven worthwhile in acquainting students with areas they have not worked in as yet. The student has the opportunity to make an informal talk. The program Administrator has the opportunity to hear firsthand the level and types of assignments given the student. This proves to be a very effective control. Departments who do not provide appropriately related training experience do not stay in the program.
2. Annually the university student is asked to write a report concerning his work experience during that year. The report is descriptive in part, but what is more important from our point of view is the student's discussion of what impact his work experience has had on his career objectives. Has the experience reinforced his thinking or has a new channel been opened through which he can more profitably apply his talents and interests?

The university cooperative student is rotated on a fixed interval schedule every twelve months. We have been experimenting with a variable schedule which would give the underclassman broader exposure starting with a three-month schedule working up to a twelve- or fifteen-month schedule for seniors. The latter period would permit more continuity and encourage delegation to the senior student of more complex and demanding assignments. This same type of variable schedule might also be applicable to the High School Program.

As is the nature of most processes, the work-study approach to vocational education is a dynamic system. It must adapt itself to the changing environment in which it finds itself. In this sense, it must be a self-adaptive system to remain vital. The work-study program has a very crucial role in preparing young men and women to cope effectively in their working environment. This objective is not easily attained.

As I have commented earlier, the principle of cooperative education is simple in concept. The embodiment of the concept into effective practice takes the best efforts of each of the interested parties, the student, the school, and the company.

Slide 1

NCR HIGH SCHOOL

COOPERATIVE STUDENT PROGRAM

	<u>Female</u>	<u>Male</u>	<u>Total</u>
Juniors	43	14	57
Seniors	<u>31</u>	<u>20</u>	<u>51</u>
<u>Total</u>	74	34	108

Slide 2

COOPERATIVE STUDENT SELECTION PROCESS

<u>Period</u>		
February	Initial NCR contact with the School Coordinators	Step I
March-April	Preliminary NCR screening a. Testing b. Interview with Co-op Program Administrator	Step II
May-June	Final interview and placement a. Employment interview b. Department management interview	Step III

Slide 3

PTFI

PERSONNEL TEST REPORT

1rb

Date of Test(s) May 20, 1965

☐ Male
☐ Female

No. 62082

Name Jane Doe

Department_

Age 17

Position

CLASSIFICATION Right Hand

[illegible][illegible]

X-1360-9 1/24/66 NCR NOTE: Please see reverse side for summary of test results.

Slide 5

PLACEMENT OF HIGH SCHOOL COOPERATIVE STUDENTS

Co-ops in Machine Trades Division

Departments:

Toolmaking
 Equipment Maintenance
 Cash Register Engineering Machine Shop
 Accounting Machine Engineering Machine Shop
 Physical Research Machine Shop
 Numerical Control
 Tool Inspection
 Equipment Engineering Lab

Assignments:

Operate basic machines such as lathes, milling machines, grinders, drill presses.

Operate NC drill press
 Help inspect petty tools
 Assistant to evaluation engr.

Co-ops in Electrical Divisions

Departments:

Quality Engineering
 Electrical Test
 Electrical Department
 Peripheral Equipment Engineering
 Data Processor Engineering

Assignments:

Wireman, junior technician, and helper in electrical maintenance.

Slide 6

PLACEMENT OF HIGH SCHOOL COOPERATIVE STUDENTS

Co-ops in Sheet Metal Division

Department:

Sheet Metal

Assignment:

Helper on sheet metal work

Co-ops in Printing Trades Division

Department:

Printing

Assignment:

Press Assistant, Composing Room Assistant,
Offset Plate Assistant

Co-ops in Accounting and Business Education Divisions

Departments within following Divisions:

Financial
Marketing
Industrial Relations
International

Assignments:

Filing, posting, sorting, typing,
dictation, operate duplicating
machines, receptionist, sort and deliver
mail, grade tests, and prepare test graphs.

Slide 7

WEEKLY SALARY FOR PATTERSON HIGH SCHOOL COOPERATIVE STUDENTS
IN ACCOUNTING AND OFFICE EDUCATION

<u>Scheduled Increases</u>	
Starting rate	\$59.10
Completion of 6 months	61.60
Completion of 1 year	64.10
Completion of 1-1/2 years	66.60
Completion of 2 years	69.10

Slide 8

HOURLY RATES FOR PATTERSON HIGH SCHOOL COOPERATIVE STUDENTS
IN MACHINE TRADES, ELECTRICAL, INDUSTRIAL ELECTRONICS, PRINTING, SHEET METAL

<u>Scheduled Increases</u>	
Starting rate	\$2.205
Completion of 6 months	2.255
Completion of 9 months	2.305
Completion of 1 year	2.355
Completion of 15 months	2.405
Completion of 18 months	2.445

Slide 10

PATTERSON HIGH SCHOOL GRADUATING SENIORS

by Year of Graduation			
<u>Year</u>	<u>Number in Office</u>	<u>Number in Factory</u>	<u>Year Totals</u>
1966	31	20	51
1965	53	10	63
1964	24	23	47
1963	32	23	55
1962	30	24	54
1961	37	23	60
1960	35	30	65
1959	32	27	59
1958	24	25	49
1957	24	27	51
1956	25	15	40
1955	21	24	45
1954	13	14	27
1953	16	24	40
1952	13	21	34
1951	16	18	34
1950	15	14	29
1949	16	29	45
1948	16	24	40
1947	26	19	45
1946	11	19	30
1945	14	7	21
1944	25	22	47
1943	4	15	19
1942		1	1
1941		1	1
Totals	553	499	1,052

Slide 9

John H. Patterson Cooperative High School
Semi-Annual Rating Scale

Firm Name The National Cash Register Company
 Name of Co-op _____
 Job Held _____

Will a person who has supervision of her work please place
 check marks in spaces below to represent student's grade.

Student's Qualifications	Excellent 95	Good 85	Fair 75	Poor 65	Special Grade
APTITUDE					
Quickness to learn		✓			
Ability to carry out directions					
QUALITY OF WORK					
Attaining Standards	✓				
Freedom from error and waste					
QUANTITY OF WORK					
Output of satisfactory work	✓				
INITIATIVE					
Self-reliance					
Resourcefulness in planning and carrying out a job assigned		✓			
Sees work to be done and does it					
DEPENDABILITY					
Attendance and punctuality					
Can be depended upon to complete assigned job	✓				
Observes safety rules					
Keeps information confidential					
Is honest					
APPEARANCE					
Well groomed. Neat					
Properly attired for the job	✓				
Does not "primp" during work					
ATTITUDE					
Willingness to accept correction					
Willingness to follow rules	✓				
Respect for authority					
Interest in work					
COOPERATION					
Ability to get along with others					
Willingness to help others get out required work	✓				

Comments (Record anything of special interest regarding student or her work)

Graded by W. E. Helmstadter Head, Inventory Accounting
 Name Department

Please mail to: Miss Mary A. Kost
 Patterson Cooperative High School, Date 11-15-65
 118 East First Street, Dayton 2, Ohio

SELLING THE COOPERATIVE PROGRAM

Edward G. Blendon

A School-Work Program is designed to serve several different purposes. It provides a better understanding and appreciation of our business enterprises and strengthens the relationship between the school and the business community.

Students are exposed to experiences which stimulate their interest and make classwork more meaningful. It familiarizes them with potential employment possibilities, and in a great majority of cases the job becomes full-time upon graduation. It also offers students in financial need a way to earn money to assure staying in school.

The programs offered in Philadelphia are Cooperative Office Education, Distributive Education, and School-Work.

The teacher-coordinator plays a vital role in the success of these programs. An important responsibility is job placement. This function entails making contacts with business executives, employment personnel, and store proprietors in order to sell the programs and secure part-time jobs. It is, therefore, of utmost importance for these teachers to have a well-rounded business background in addition to professional training. Business people display a keen interest in teachers who are business orientated.

It is wise to encourage teachers of these programs to obtain summer employment in order to strengthen their knowledge of business activities and procedures.

It is very important to inform all teachers about the school-work programs. They can be very helpful in promoting these projects. Time should be allotted during a faculty meeting to describe the school-work programs and explain how they benefit the students, the school, and the community.

There are many effective recruitment techniques and procedures for attracting prospective students.

1. We visit advisory classes.
2. We present programs during an assembly period in our own school and in nearby junior high schools.

When we visit classes or are scheduled to make a presentation in the assembly, we ask students already in the program to describe their experiences. We frequently invite graduates to tell the audience how the school-work program helped them attain success in business.

The following devices can be used effectively to stimulate interest:

1. Insert notices in the daily school bulletin.
2. Describe offerings in the school magazine.
3. Include write-ups of successful graduates who participated in these programs.
4. Build attractive bulletin board displays.
5. Encourage students who are enrolled in these programs to solicit worthy applicants.
6. Ask administrators, counselors, and other members of staff to recommend students.
7. Consider students who are currently employed after school as likely candidates. Many employers appreciate the services of students enrolled in a work-program under school supervision.
8. Make arrangements for groups of students to visit business and industrial establishments where opportunities are available for part-time employment.
9. Invite junior high school students to observe school-work classes in action and report observations to their fellow classmates. We have been informed that many junior high students who had little desire to continue their education have been encouraged to remain in school because of their inclination to enroll in one of the work programs.
10. Make use of appropriate visual aids which describe and illustrate employment activities (films, slides, charts, posters, etc.).
11. It is very important to acquaint parents with the operation and value of school-work programs. This can be accomplished as follows:
 - a. Describe the program at a scheduled meeting of the Home and School Association.
 - b. Invite an employment manager to explain the job opportunities.
 - c. Arrange for students in the program and graduates to tell about their experiences.
 - d. Ask parents of students enrolled in the program to inform the group of the benefits and advantages.
 - e. Permit parents to observe school-work classes.
 - f. Prepare appropriate literature for distribution to parents of interested students.

Student Selection

The teacher-coordinator is responsible for recruitment in addition to job placement, teaching, and employment follow-up. Any student who can profit from work experience should be given the opportunity to do so regardless of the curriculum in which he is enrolled. There is room in the program for students of every ability.

Students are admitted on the basis of school records, health, appearance, ability to get along with people, teacher recommendations, willingness to accept a job for which they are qualified, and parental permission.

The central office assumes responsibility for job placement in the cooperative-office education program.

Providing Job Opportunities

We are very proud of the wholesome and cordial relationship which exists between the commercial department and the business community. Our business friends not only provide many resources which help improve instruction but are always ready and eager to share educational experiences with us.

Since the success of school-work programs is dependent upon the availability of jobs, we use many techniques and procedures to provide job opportunities for our students.

Selected groups of business leaders are periodically invited to observe and evaluate the commercial program. The schedule includes class visitation and luncheon in the faculty dining room followed by a conference. The program offerings are described at this time, and the visitors are encouraged to express reactions and to voice opinions. We are alert to helpful suggestions made by our guests.

We receive many letters of appreciation from business men after these visits. The following is a brief resume of comments included in the letters:

"I genuinely enjoyed observing good teacher-student relationships in action."

"We were very happy to learn that your department provides effective guidance and instruction in the following skills, practices, and behavior patterns: handwriting, spelling, fundamentals of arithmetic, grooming, and ability to get along with people."

"Thank you for giving us the opportunity to see how the commercial department of a Philadelphia high school can be so effective."

"I think it is a very good idea to show this type of work to business people and heartily recommend that you continue to do so."

"It is meetings such as the one we had which will go a long way to help individuals in industry to more fully appreciate the problems you are facing and the strides you are taking to overcome them."

"It surely makes our job easier when people who manage and supervise can see for themselves what excellent training their future employees receive."

It is always gratifying to know that our guests are impressed with the wholesome and democratic atmosphere which exists in classrooms, the friendly and enthusiastic teachers, the outstanding courtesy displayed by students, and a well-rounded program which is designed to prepare students for vocational efficiency.

It is also our practice to schedule dress-up lessons for seniors in retailing and stenography classes long before graduation. On these occasions students are instructed to dress properly for a job interview and are given the opportunity to demonstrate how to apply for a job.

Employment personnel are invited to observe and participate in these programs. Our visitors heartily approve of the realistic approach in preparing students for the business world.

Outstanding business and industrial leaders are invited to participate in career conferences.

We also conduct school-wide good grooming contests and invite business executives to serve as guest speakers in order to inspire the students and encourage them to participate in the program.

Members of the business community appreciate the many courtesies which are extended to them by our school. We provide students for part-time employment in retail organizations for the holiday seasons when extra services are very much in demand. In many instances employment managers are permitted to interview our seniors in school before graduation. They are very grateful for the opportunity to recruit students in advance.

Our consumer credit course in the eleventh year is designed to prepare students for careers in the retail credit field. The Philadelphia Retail Credit Association sponsors this program. A variety of rich resources which are certain to motivate, stimulate, and enlighten the students are easily accessible for class use. Credit organizations make available films, charts, informational folders, and consumer digest periodicals. Prominent credit executives are scheduled for speaking assignments. Planned visits to industry by a group of students who report their experiences and observations, add to the realistic aspect of this program.

Opportunity is provided for a select group of students to work in credit organizations on a cooperative school-work basis during the senior year.

We permit students to participate in career programs in business and industry. In these projects, students receive on-the-job experiences for a day under the sponsorship of trained employees. This program provides job guidance for students and at the same time employers have the opportunity to observe potential employees.

We encourage business and community organizations to provide awards at graduation for students who have displayed excellent scholarship, outstanding leadership, or have rendered worthwhile services to the school and community. This is an excellent device to develop an interest in school activities, and at the same time strengthen school-community relations. The donors of the awards are given recognition in the following manner:

1. Announcement in school assembly.
2. Newspaper publicity.
3. A personal note of acknowledgment is sent by the principal.
4. Recipients write letters of appreciation.
5. Lists of award winners and names of contributors are distributed to everyone attending graduation exercises.

We hold membership in business and community organizations and also participate and provide leadership in community activities. In addition we attend functions sponsored by these groups.

Many years ago I assisted in the reorganization of a local business association and had the honor of serving as secretary for two years. In this capacity I became acquainted with business leaders in the school community and was, therefore, able to secure many part-time jobs.

About a year ago I was invited to be a guest speaker at a local businessmen's organization. My topic was "School-Work Programs at the John Bartram High." Before the evening was over, I had the promise of sixteen part-time jobs. Employers who are pleased with our programs are asked to suggest names of businessmen who would be interested in employing our students on a part-time basis. Graduates of our programs are contacted and asked to recommend the names of potential employers. We encourage students to seek and obtain jobs on their own initiative. Leads can be obtained from the following sources:

1. Newspaper want ads.
2. Store window "help wanted" signs.
3. State Employment agencies.
4. Parents, relatives, and friends.

Personal visits to stores and offices often result in job placement.

It is of utmost importance to prepare students for a job interview. If time is limited, make available instructional materials which will acquaint them with the basic steps and procedures for a successful job interview.

Publicity

Publicity plays a vital role in our efforts to build and strengthen our community relations and also to obtain part-time employment for our students.

We prepare material for insertion in local and city newspapers, administrative publications, and business house organs. Items which we include are:

1. Description of school-work programs and the importance of community participation and support.
2. Acknowledgment of school visits made by businessmen.
3. Appreciation for services rendered by guest speakers.
4. Names of organizations which employ our students.
5. "Write-up" of successful graduates.
6. Tributes paid to businessmen who provide awards to outstanding graduates.
7. Activities which benefit the students, school, and community.

We participate in radio and television programs.

We make contacts by means of direct mail media. Excellent results have been achieved by sending letters and return postcards to members of the business community explaining our programs and asking them to make available part-time employment for our students. Names and addresses are obtained from the telephone directory. Members of the faculty are also asked to submit names of potential employers.

When I received my appointment as a teacher-coordinator of distributive education twenty-five years ago, I made a quick tour of the business community in the vicinity of the school. The section of the city was new to me since I seldom had occasion to visit it. It took me three weeks to enroll twenty-four students for the class. This was accomplished very easily since I had the cooperation of the administrative staff. The next procedure was to find suitable jobs. I assigned students to tour the various streets where stores were located and make note of address and name of proprietor, or names of businesses as they were shown on store windows. In the meantime, I prepared literature describing the program, including information relating to student

placement. A return postcard was included. Two hundred envelopes were addressed and mailed when the students submitted the necessary information.

As a result of this publicity, store visits, and personal contacts, all twenty-four students were employed within a period of three weeks.

The Director of our division and his staff promote activities which are greatly responsible for the success of the work-programs.

Business advisory committees are organized for cooperative office education and distributive education. These committees are composed of outstanding business leaders who are also the employers of our students. They provide the guidance and support which make possible well-rounded and successful programs.

A certificate of merit is given to each employer. It contains the signatures of the Superintendent of Schools, the President of the Philadelphia Chamber of Commerce, and the Mayor of the City of Philadelphia. The presentation is made by the teacher-coordinator who has contact with the employer. The recipients are very proud of this citation since it indicates that the service they are performing is recognized by outstanding educational, civic, and business leaders.

Schools cooperate with business by assigning students to participate in the following programs:

1. Office Executive for a Day.
2. Junior Administrative Management Association.
3. Junior Credit Association.
4. Junior Achievement.
5. Invest in America

In the past, our students have also participated in Retail Executive for a Day and Junior Realtor Association.

The Philadelphia Public School System, through its Division of Education, cooperates with business firms in a program entitled "Two Week Look at Business." The program, which is conducted during the summer, is designed to motivate students to remain in school, raise their achievement level, graduate, and qualify for jobs in the commercial field for which trained personnel will be needed.

Tenth-grade commercial students who were not performing to the best of their ability in school were selected. In many cases attendance and punctuality records were poor. Marks in general were below the pupil's potential as indicated by test scores. Students were not employed nor were they paid for reporting to the company for the two weeks. Their carfare and lunch were supplied by the cooperating companies.

The pupils who participated have had a rare opportunity of being a part of the working and social life of excellent firms. They have learned at first-hand about working conditions, wages, and fringe benefits. They have seen and participated in a wide variety of clerical jobs. They have become familiar with office terminology, and they have seen skills learned in school used in actual job situations. They know that fundamentals such as spelling and arithmetic are important. It is apparent that this program has prepared pupils to qualify for the co-operative course and has also gained the cooperation and support of business firms.

The highlights of all these activities are the cooperative office education and distributive education banquets which are scheduled in late spring near the close of the school term. They are attended by top-level administrators, principals, department heads, coordinators, employers, alumni, and business and community leaders. An outstanding business executive or civic leader is invited to serve as a guest speaker. Many awards are presented to students for worthy achievements and accomplishments.

In conclusion, it is a challenging and daring venture to use every available technique and device to gain the cooperation and support of the business community in order to promote school-work programs.

We are very grateful to our school administrators for their guidance and cooperation. Without their support, the success of the cooperative programs would not have been possible.

The State Department of Public Instruction in Harrisburg, Pennsylvania, is to be commended and congratulated for providing effective and dynamic leadership.

APPENDICES

- A. Biographical Sketches of Speaker-Consultants
- B. Forms for Conducting the Seminar
 - Discussion Group Plan
 - Discussion Group Organization
 - Evaluation Form
- C. Selected Bibliography
- D. Forms for Administering Cooperative Education
 - Student Agreement
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- E. Roster of Participants
- F. Reports of Selected Cooperative Work-School Programs

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Appendix A

Biographical Sketches
of
Speaker-Consultants

JOSEPH ACKERMAN, Ph.D., University of Illinois, is an agricultural economist and a native of Illinois. Presently, he is managing director of the Farm Foundation, Chicago, and president of the National School Boards Association. Dr. Ackerman is a member of the National Council of the Boy Scouts of America, and the Board of Trustees of the Joint Council on Economic Education. He has co-authored Town and Country Churches and Family Farming, and served as editor of Farm and Rural Life After the War, and as co-editor of Family Farm Policy and Agrarian Reform and Moral Responsibility. He has been recognized by the American Country Life Association for outstanding contribution to the improvement of rural life.

EDWARD G. BLENDON, M.S., New York University, is presently Department Head of Commerce, John Bartram High School, Philadelphia. His varied teaching and business background includes experience as Training Director for the Sun Ray Drug Company, Philadelphia. Mr. Blendon has served as head counselor and assistant director of a children's summer camp. He is a member of the Board of Directors of the Temple University College of Education and the Retail Council and Retail Task Force of the Philadelphia Chamber of Commerce. He has authored "The High School-- Multiple Programs in Business Education," a chapter in the 1966 Eastern Business Teachers Association yearbook.

RALPH O. GALLINGTON, Ed.D., George Washington University, a native of Illinois, is presently Professor of Industrial Education and Professor of Guidance of Psychology at Southern Illinois University, Carbondale. He has also taught at the University of Maryland, Eastern Illinois University at Charleston, and Pennsylvania State University. Dr. Gallington has worked as an industrial engineer, products designer and engineer, and plant superintendent. He is listed in Who's Who in America, Who's Who in Engineering, Leaders in American Science, and Who's Who in American Education. He has contributed many professional articles and has co-authored Course Construction in Industrial Arts and Vocational Education.

VIRGINIA KEEHAN, Ed.D., University of Colorado, is presently Director, Program Division, Women's Centers Directorate, Job Corps, Office of Economic Opportunity, Washington, D.C. She has also served as Specialist for Program Organization, Guidance and Counseling Programs Branch, U.S. Office of Education. In the New Mexico State Department of Education, she has served as State Director of Guidance and Pupil Personnel Services and Director of Title V-A, National Defense Education Act. Dr. Keehan has taught at New Mexico State University, University Park, and has served as Director of Guidance and Psychological Services for the Albuquerque, New Mexico, public schools.

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SAM W. KING, M.A., West Texas State University, a native of Texas, is presently Field Representative, Manpower Development and Training, U.S. Office of Education, Department of Health, Education and Welfare, Denver, Colorado. He has served as area supervisor and assistant director of Vocational-Industrial Education for the Texas Education Agency. His many years of federal government service includes work as Program Specialist, Trade and Industrial Education Branch, U.S. Office of Education; Field Director, Office of Manpower, Automation and Training, U.S. Department of Labor; and Chief, Foreign Manpower Development Program Staff, Office of Manpower, Automation and Training, U.S. Department of Labor. Mr. King is a Lieutenant Colonel in the U.S. Marine Corps Reserve.

E. F. LAUX, a graduate of Hamilton College and a native of Jamaica, New York, is presently Vice President for Marketing of the Ford Motor Company, Dearborn, Michigan. His distinguished automotive career began in 1947. For the Ford Motor Company, he has served in the following capacities: Car Sales Manager at St. Louis, Missouri; Division Sales Planning and Analysis Manager at Dallas, Texas; Assistant District Sales Manager at Houston; Car Promotion and Training Manager at the general sales offices; Parts and Service Marketing Manager; Ford Division Vehicle Marketing Manager; General Marketing Manager and General Sales Manager; and Executive Director, Marketing Staff.

MORTON LEVINE, M.A., American University, is presently Special Projects Director, Division of Manpower and Occupational Outlook, Bureau of Labor Statistics, Washington, D.C. Since 1949, Mr. Levine has been associated with the U.S. Department of Labor in positions involving responsibility for program and administration. He has authored numerous articles in the field of manpower and occupational outlook and is listed in Who's Who in the South and Southwest and Who's Who in the East.

(Joseph W. Hines, Asst. Regional Director, Bureau of Labor Statistics, U.S. Department of Labor, Cleveland, Ohio, presented the speech prepared by Morton Levine.)

K. OTTO LOGAN, M.A., University of Minnesota, is presently Director of Distributive Education for the State Board of Vocational Education, Olympia, Washington. He has served as Distributive Education Coordinator and Curriculum Director in Aberdeen, Washington. He has also served as president of the following organizations: American Vocational Association (1965-1966), Distributive Education Clubs of America (DECA), Inc., and National Association of State Supervisors of Distributive Education (NASSDE). Mr. Logan has contributed articles to many professional magazines and is listed in Who's Who in the West.

GEORGE L. LUSTER, Ph.D., The Ohio State University, a native of Kentucky, is presently Associate Professor and Teacher Trainer of Agricultural Education at the University of Kentucky. From 1962 to 1964, he was employed by the Near East Foundation, New York City, as American Co-Director of Ahwaz Agricultural College in Ahwaz, Iran. He has

contributed numerous teaching aids and magazine articles in agricultural education and has authored three publications for the Ahwaz Agricultural College.

WILLIAM B. LOGAN, Ph.D., The Ohio State University, a native of North Carolina, is presently Professor of Distributive Education and Director of Management Institutes at The Ohio State University. He has served as president of the American Vocational Association (1961-1962) and president of the Council of Distributive Educators. Dr. Logan was a member of President Kennedy's Panel of Consultants on Vocational Education. He has co-authored three books, The Retailing Salesperson at Work, Store Salesmanship, and Facts about Merchandise, and is a contributing editor to the 1965 edition of the Encyclopedia Americana with a 6,000-word article on vocational education. He is listed in Who's Who in American Education, Who's Who in the Midwest, and Who's Who in America.

MARY V. MARKS, M.S., New York University, a native of New Jersey, is presently Program Specialist, Distribution and Marketing, Division of Vocational and Technical Education, U.S. Office of Education, Washington, D.C. Her professional background includes experience as Education Research and Program Specialist (Pacific Region), Distributive Education Branch, U.S. Office of Education and Head of Department and State Teacher Educator for Distributive Education at Richmond Professional Institute, College of William and Mary, Richmond, Virginia. She has contributed widely to professional journals and has authored Role of Teacher Education in Distributive Education.

RALPH E. MASON, Ph.D., University of Illinois, is presently Professor of Business and Chairman, Division of Business and Distributive Education, Indiana State University at Terre Haute. His varied business and teaching experience includes work in retailing and sales, secondary school teaching and supervision in the public schools in Illinois, and college-level teaching at the University of Illinois. He has authored Methods in Distributive Education and co-authored Cooperative Occupational Education and Work Experience in the Curriculum, Office Career Notebook, Distributive Education Notebook for Occupational Growth, and Case Studies in Marketing and Distribution.

DENNIS H. PRICE, Ed.D., Indiana University, is presently Professor of Education and Director of Vocational Education at the University of Cincinnati. He has also taught at Purdue University and Indiana State University at Terre Haute. His professional background includes experience as Education Specialist in the Republic of Panama under the auspices of the Institute of Inter-American Affairs, U.S. Department of State. He has contributed widely to the publications of his field including a series of nineteen apprenticeship manuals, and a technical trigonometry textbook. He is listed in Who's Who in American Education, Who's Who in the Midwest, and Who's Who in Ohio.

MRS. E. CHRYSTINE SHACK, M.A., Rider College, a native of Tennessee, is presently Supervisor of Business Education for New Jersey. Her interesting teaching background includes experience as Teaching Principal and Assistant Director, Migrant Demonstration Schools, State of New Jersey; Principal, Cranbury School, Migrant Demonstration Schools, State of New Jersey; and Critic Teacher, Trenton State College and Rider College. In May, 1965, she was honored as the Woman of the Month by Rider College. Mrs. Shack has prepared three television documentaries which focused attention to the education of migrant children.

FARMER SMITH, M.A., University of North Carolina at Chapel Hill, is presently Assistant Professor in the Department of Industrial Education at North Carolina State University, Raleigh. His well-rounded background includes experience as a construction engineer, school administrator, guidance counselor, mathematics teacher, industrial cooperative training coordinator, and teacher trainer. Mr. Smith is a Colonel in the U.S. Air Force Reserve.

HUGH M. STEPHENSON, M.B.A., Xavier University, Cincinnati, is presently Manager of Manpower and Organization Development for the National Cash Register Company, Dayton, Ohio. For NCR, he has also served as Manager of Personnel Services for the Research and Development Division with additional experience in the recruitment and selection of personnel for the Engineering Department. Mr. Stephenson is a member of the University of Dayton Graduate School faculty.

JOHN A. SESSIONS, Ph.D., Cornell University, is presently Staff Representative, Department of Education, American Federation of Labor and Congress of Industrial Organizations (AFL-CIO), Washington, D.C. Dr. Sessions has taught at The University of Michigan and Cornell University and has served as lecturer-consultant of workers' education in Norway, Denmark, Sweden, France, and Indonesia. He is a member of the Board of Education for the District of Columbia and was a participant in the White House Conference on Education (1965). He has co-edited Seventy Years of Life and Labor by Samuel Gompers, and authored Writers for Tomorrow and Labor, Champion of Education.

JEFFREY R. STEWART, JR., Ed.D., New York University, is presently Associate Professor and Head of the Business Education Department, Virginia Polytechnic Institute, Blacksburg. He has co-authored textbooks in records management, filing and recordkeeping. One publication in records management has been adopted by the U.S. Office of Economic Opportunity for use nationally with Job Corps classes. Dr. Stewart has served in the U.S. Air Force as a pilot, training officer, and operations officer.

RALPH M. STOGDILL, Ph.D., The Ohio State University, is presently Professor of Business Organization, The Ohio State University. His varied professional background concerning the developments of role theory and

organization theory includes experience as Research Social Scientist, Stanford University. Dr. Stogdill has authored Individual Behavior and Group Achievement, Leadership and Structures of Personal Interaction, and Team Achievement Under High Motivation.

ROBERT M. WORTHINGTON, Ph.D., University of Minnesota, is presently State Director of Vocational Education for New Jersey. He has taught in the St. Paul, Minnesota, public schools, at Purdue University, University of Minnesota, and Trenton State College. Dr. Worthington is a member of the Research Committee of the American Industrial Arts Association. He is the past president of the National Association of Industrial Teacher Educators, and has served three years as editor and associate editor of the Journal of Industrial Teacher Education.

JAMES H. WYKLE, M.A., George Peabody College for Teachers, is presently Education Research and Program Specialist in Office Education for Region IV, Division of Vocational and Technical Education, U.S. Office of Education, Atlanta, Georgia. Mr. Wykle has served as State Supervisor of Business and Office Education for Georgia. His teaching background includes experience in the Tennessee public schools and at Mississippi State College, Columbus. He is past president of the Southern Business Education Association, a division of the National Business Education Association, and is listed in Who's Who in American Education.

Appendix B

Forms for Conducting the Seminar

The forms in this section were actually used for conducting the Seminar on August 2, 3, and 4, 1966

Discussion Group Plan

The same plan will be followed each afternoon

Under the leadership of six Group Chairmen, each afternoon will be devoted to three activities. The proposed time schedules follow. Please attend the sessions to which you are assigned.

1:45 - 2:45 p.m.

Reaction Panel of Selected Leaders

- A. Reactions to presentations given in the morning--what questions, points, and issues should be clarified and discussed? Opportunity is provided for restatement and interpretation of significant points of view.
- B. Special assigned topic for the group. Thought-starter questions will be provided.

2:45 - 3:00 p.m.

Intermission

3:00 - 4:00 p.m.

Reaction Roundup--each participant will make a 1-2 minute presentation on one of the following:

- What is one major idea learned?
- What is one big unanswered question?
- What is one major recommendation?

4:00 - 4:30 p.m.

General Summation for the Day including Morning and Afternoon Sessions

- What do we know?
- What recommendations can we make?
- What needs to be researched?

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(Sample Form)

Discussion Group Organization

All sessions will be held in the Civil and Aeronautical Engineering Building.
 PLAN AND ASSIGNMENTS FOR AFTERNOON SESSIONS

Group	Tuesday, August 2 1:45 - 4:30 p.m.	Wednesday, August 3 1:45 - 4:30 p.m.	Thursday, August 4 1:45 - 4:30 p.m.
I	<u>Title:</u> Effect of Employment Trends and Changing Technology <u>Place:</u> Room 311 <u>Chairman:</u> JAMES H. WYKLE, Specialist, Region IV, Dept. of HEW, Atlanta, Ga. <u>Recorder:</u> _____ <u>Summarizer:</u> _____ <u>List of Participants:</u>	<u>Title:</u> Preparation of Teacher-Coordiators <u>Place:</u> Room 311 <u>Chairman:</u> JAMES H. WYKLE <u>Recorder:</u> _____ <u>Summarizer:</u> _____ <u>List of Participants:</u>	<u>Title:</u> Office Educa- tion Model <u>Place:</u> Room 311 <u>Chairman:</u> JAMES H. WYKLE <u>Recorder:</u> _____ <u>Summarizer:</u> _____ <u>List of Participants:</u>
II	<u>Title:</u> Advisory Committees; Attitudes and Influence of School Boards <u>Place:</u> Room 220 <u>Chairman:</u> SAM W. KING Field Representative Region VIII Dept. of HEW Denver, Colorado <u>Recorder:</u> _____ <u>Summarizer:</u> _____ <u>List of Participants:</u>	<u>Title:</u> Problems in Organizing and Operating a Cooperative Program <u>Place:</u> Room 220 <u>Chairman:</u> SAM. W. KING <u>Recorder:</u> _____ <u>Summarizer:</u> _____ <u>List of Participants:</u>	<u>Title:</u> Agricultural Education Model <u>Place:</u> Room 220 <u>Chairman:</u> SAM W. KING <u>Recorder:</u> _____ <u>Summarizer:</u> _____ <u>List of Participants:</u>

Group	Tuesday, August 2 1:45 - 4:30 p.m.	Wednesday, August 3 1:45 - 4:30 p.m.	Thursday, August 4 1:45 - 4:30 p.m.
III	<u>Title:</u> Psychological, Social, and Emotional Aspects of Cooperative Education <u>Place:</u> Room 316 <u>Chairman:</u> THOMAS J. WEYANT State Supervisor Dept. of Public Inst. Harrisburg, Penna. <u>Recorder:</u> _____ <u>Summarizer:</u> _____ <u>List of Participants:</u>	<u>Title:</u> Cooperative Education for Youth with Special Needs <u>Place:</u> Room 316 <u>Chairman:</u> THOMAS J. WEYANT <u>Recorder:</u> _____ <u>Summarizer:</u> _____ <u>List of Participants:</u>	<u>Title:</u> Distributive Education Model <u>Place:</u> Room 316 <u>Chairman:</u> THOMAS J. WEYANT <u>Recorder:</u> _____ <u>Summarizer:</u> _____ <u>List of Participants:</u>
IV	<u>Title:</u> The Justification for the Cooperative Program <u>Place:</u> Room 211 <u>Chairman:</u> HAROLD L. MAILMAN Director, State Department of Education, Augusta, Maine <u>Recorder:</u> _____ <u>Summarizer:</u> _____ <u>List of Participants:</u>	<u>Title:</u> The Challenging Roles of Teacher-Coordinator <u>Place:</u> Room 211 <u>Chairman:</u> HAROLD L. MAILMAN <u>Recorder:</u> _____ <u>Summarizer:</u> _____ <u>List of Participants:</u>	<u>Title:</u> Trade and Industrial, Technical, and Health Education Models <u>Place:</u> Room 211 <u>Chairman:</u> HAROLD L. MAILMAN <u>Recorder:</u> _____ <u>Summarizer:</u> _____ <u>List of Participants:</u>
V	<u>Title:</u> Occupational Strands Common to All Cooperative Education <u>Place:</u> Room 314 <u>Chairman:</u> JOHN R. WYLLIE Vocational Division State Department of Education Trenton, New Jersey <u>Recorder:</u> _____ <u>Summarizer:</u> _____ <u>List of Participants:</u>	<u>Title:</u> Evaluation of Cooperative Education <u>Place:</u> Room 314 <u>Chairman:</u> JOHN R. WYLLIE <u>Recorder:</u> _____ <u>Summarizer:</u> _____ <u>List of Participants:</u>	<u>Title:</u> Home Economic Education Model <u>Place:</u> Room 314 <u>Chairman:</u> JOHN R. WYLLIE <u>Recorder:</u> _____ <u>Summarizer:</u> _____ <u>List of Participants:</u>

Evaluation Form

Instructions: Please check your evaluation in the columns to the right.
Check column 4 for Excellent; 3 for Good; 2 for Average; and 1 for Poor.

- | | High
4 | 3 | 2 | Low
1 |
|---|-----------|----------|----------|----------|
| 1. To what extent did you secure help and suggestions for improving your state or local cooperative education program? | () | () | () | () |
| 2. To what extent did the seminar contribute ideas and procedures for the promotion and expansion of the cooperative education plan in your state or locality? | 4
() | 3
() | 2
() | 1
() |
| 3. To what extent are you better prepared to conduct a seminar or conference on cooperative education in your state? | 4
() | 3
() | 2
() | 1
() |
| 4. To what extent has the seminar helped you more clearly to define the basic elements common to all cooperative programs? | 4
() | 3
() | 2
() | 1
() |
| 5. To what extent has the seminar aided in a better understanding of potential interrelationships between vocational services? | 4
() | 3
() | 2
() | 1
() |
| 6. In general, did the speakers provide you with new and constructive ideas? | 4
() | 3
() | 2
() | 1
() |
| 7. Did the provision for group reaction to the seminar speakers in the afternoon discussion groups contribute to a better understanding of cooperative education? | 4
() | 3
() | 2
() | 1
() |
| 8. Were the special topics used in the afternoon discussion groups suitable and profitable? | 4
() | 3
() | 2
() | 1
() |
| 9. Did the "reaction roundup" contribute to the value of the afternoon discussion group? | 4
() | 3
() | 2
() | 1
() |
| 10. Other reactions and comments: | 4
() | 3
() | 2
() | 1
() |

Appendix C

Selected Bibliography

Books, Research Studies, and Manuals

1. An Annotated Bibliography of Periodical Literature in Distributive Education, 1951 - 1961. East Lansing, Michigan: Bureau of Research and Publications, College of Education, Michigan State University, 1962.
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24. Martin, Marie Young, "An Evaluation of the Work Experience Program in the Los Angeles City High Schools." Unpublished Doctoral dissertation, The University of Southern California, Los Angeles, 1954.

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Appendix D

Forms for Administering Cooperative Education

Student Agreement

Cooperative Part-Time Training Program

DISTRIBUTIVE EDUCATION
SERVICE STATIONOFFICE OCCUPATIONS
TRADE AND INDUSTRY

The Part-Time Occupational Training Program has been discussed with me by my coordinator and I understand that through enrolling in this program:

1. I am not guaranteed a job and neither am I assigned to a job. My coordinator may suggest a job which seems suitable and then it is up to the employer and to me to discuss the requirements and the other responsibilities of the job. If I qualify and am hired I am in the Coop Program for the year; If I do not qualify and am unable to get hired on a job I shall return to the regular school program.
2. I am to receive training on a job, or in an industry, in which I hope to work after graduation.
3. I am to be paid the going-rate for my work.
4. I am to have a combined school-work week which will not exceed the number of hours which are standard for the work week in the industry where I am employed. I must average a minimum of 15 hours on the job per week over the course of the year.
5. I will discuss my future plans with my coordinator and the high school counselor.
6. I may earn a maximum of four semester credits toward graduation on this Program; two semester credits for Occupational Relations, and two semester credits of Occupation Lab.
7. I will be present and on time each day, both in school and at work. I will not attend my Coop Part-Time Lab any afternoon when I have been absent from my regular morning classes.
8. I will notify my Employer, my Coordinator and the Principal's Office as far in advance as possible of my inability to report for school or work if the occasion should arise. If I am ill, I will call the school and my employer and report such illness.
9. I will be prompt and accurate in making all required reports for the school and for my employer.

10. I will at all times keep my coordinator informed of any problems which may confront me in school or on the job.
11. I will be dropped from the program resulting in a loss of 4 semester credits if I leave my employment without the consent of my coordinator.
12. I shall be dropped from the program resulting in the loss of 4 semester credits for failure to secure re-employment if I am discharged for cause.
13. I may retain my 4 semester credits for graduation by doing extensive outside class work and jobs as assigned by my coordinator if I lose my job through automation or other causes outside of my own doing.
14. I will be suspended from the program resulting in the loss of 4 semester credits if I participate in any form of truancy.
15. I must remain employed until the date of graduation or lose my credits.
16. No special privilege shall be granted to any student because he is a member of the Cooperative Part-Time Training Program.
17. I will at all times conform with the rules, regulations, and policies of the school and my employer. The school policy shall prevail in regard to smoking, attendance, and all the other areas of conduct.
18. I shall at all times perform my duties in school and on the job to the best of my ability.
19. I will fulfill all the requirements that may be set up from time to time by the state or federal department of education or our local school board pertaining to the operations of this program.
20. I understand the duties and responsibilities connected with my training and my admission to the Cooperative Part-Time Training Program, and accept this of my own accord.

Student
Part-Time Training Program.

The above provisions of the Cooperative Part-Time Training Program have been discussed with me. I hereby give my consent and approval for _____ assignment to a supervised job as a part of the regular school program. I have received a copy of these provisions for future reference.

Date _____

Signature of Parent or Guardian

From Hopkins High School, Hopkins, Minnesota

Cooperative Training Agreement

PUBLIC HIGH SCHOOL
In Cooperation With
The State Board of Control for Vocational Education*

Trainee _____ Address _____ Tel. _____
Grade _____ Coun. _____ Soc. Sec. No. _____ Date of Birth _____ Age _____
Establishment _____ Address _____ Tel. _____
Employer _____ Supervisor _____ Work Permit No. _____
Work Schedule (General) _____ Average Hrs. per Wk. _____
Occupational Approval No. _____ Date Started _____
Trainee's Job Title _____ D. O. T. _____

Work Activities
(This section to be completed by employer or supervisor, and coordinator)

School Program
(This section to be completed by student-trainees and coordinator)

=====

(Use an extra sheet to fully outline the learning experiences to be provided.)

=====

Trainee's responsibility in program:

- | | |
|--|---|
| 1. No trainee shall leave his job without first discussing the matter with his coordinator. | 1. The student's training period shall not be less than one full school year at a minimum of 15 hrs. per week. |
| 2. Each trainee shall abide by the rules, regulations, and policies of his employer during his period of training. | 2. The training plan should include work activities which are of vocational and educational value. |
| 3. Each trainee shall faithfully perform the assignments of his job and school program. | 3. The employer shall complete a brief check list (provided by the coordinator) three times a semester, indicating the trainee's progress on the job. |

*Adapted from form used by Grosse Pointe Public High School, Grosse Pointe, Michigan

School credit:

School credit toward graduation is given for the work experience, and pupils taking the course receive the same diploma, upon graduation, as is received by all graduates.

4. This training program agreed upon shall not be interrupted by either trainee or employer without consultation with the coordinator.

Approved: Date _____

Trainee _____ Employer _____

Parent or Guardian _____ Coordinator _____

AGREEMENT FOR HIGH SCHOOL CREDIT
IN
OCCUPATIONAL TRAINING

The trainee and parents do understand and agree to the following requirements:

1. Credit will be granted only upon the satisfactory performance of job duties as determined by the employer and coordinator.
2. The trainee must notify his employer not later than 10 o'clock on any day that he is unable to report for work because of illness, death in the family, or other similar emergencies. (Saturday employment 8:15 notification)
3. Unless regular school attendance is maintained the trainee will be dropped from the program.
4. The trainee must maintain satisfactory grades in all subjects in order to remain on the program.
5. No credit will be granted if the trainee quits his job without first notifying his coordinator.
6. If the trainee is released from his job, he must notify his coordinator immediately if he is to receive any credit.
7. The trainee agrees to report to his coordinator all problems or difficulties which occur at his place of employment, if the parties involved feel that this would be desirable.
8. The trainee agrees to participate in all cooperative functions related to the total program.

9. Parents or guardians will assume responsibility over any conduct or safety of the co-operative training student from the time he leaves his job until he arrives home.
10. When not at work during the afternoon school hours, the trainee is required to be at home.
11. All trainees under 18 years of age must secure a working permit at the Pupil Personnel Office - second floor - 389 St. Clair - Grosse Pointe.
12. To keep all matters of business in STRICT CONFIDENCE.
13. In order to receive full credit the trainee must be in school at least 15 hours per week and must also work at least 15 hours per week during school hours. (The maximum number of hours that a trainee under 18 may work is 33 hours per week.)
14. If there are any further questions concerning this cooperative occupational training plan contact: Coordinator's Office, Phone _____.

Employer's Evaluation of Cooperative Student

Information, as checked in the space below, will assist us in our appraisal of the Cooperative work of--

School Division _____
 for the work period of _____ to _____
 Name of employer _____
 Please return completed form to _____ by _____

It is suggested that the person most familiar with the student's work supply a frank and impersonal estimate of his or her performance by comparison with the average employee doing the same or similar work.

ATTITUDE AND INTEREST ☐ Enthusiastic ☐ Interested ☐ Average ☐ Somewhat indifferent ☐ Not interested	QUANTITY OF WORK ☐ Unusually high output ☐ More than expected ☐ Average ☐ Less than expected ☐ Below minimum requirements
ADAPTABILITY ☐ Adjusts easily--very well liked ☐ Good team worker ☐ Cooperates satisfactorily ☐ Has difficulty working with others ☐ Antagonizes fellow workers	DEPENDABILITY ☐ Entirely dependable ☐ Requires little supervision ☐ Satisfactory ☐ Sometimes neglectful or forgetful ☐ Unreliable
ABILITY TO LEARN ☐ Grasps ideas very quickly ☐ Above average ☐ Average ☐ Rather slow to learn ☐ Very slow	INITIATIVE ☐ Takes hold readily ☐ Above average ☐ Goes ahead reasonably well ☐ Somewhat lacking ☐ Lazy
QUALITY OF WORK ☐ Excellent ☐ Above average ☐ Satisfactory ☐ Below average ☐ Very poor	JUDGMENT ☐ Displays excellent common sense ☐ Usually does the right thing ☐ Ordinary ☐ Occasionally uses poor judgment ☐ Very poor--rash
ATTENDANCE ☐ Regular ☐ Irregular	PUNCTUALITY ☐ Regular ☐ Irregular
SUMMARY: Student's total performance considered: ☐ Outstanding ☐ Good ☐ Poor ☐ Very Good ☐ Mediocre ☐ Unsatisf.	
ADDITIONAL comments: _____ _____ _____	
EVALUATION MADE BY: Date _____ Name _____ Title _____ Department _____	

Appendix E

Roster of Speaker-Consultants Participants*SEMINAR ON COOPERATIVE EDUCATION
August 1-5, 1966

Ackerman, Joseph
Farm Foundation
600 S. Michigan Ave.
Chicago, Illinois

Adamson, Douglas T.
State Education Dept.
Bureau of Business and
Distributive Education
Albany, New York

Alexander, Mrs. Arthelia
Chairman of Division of Business
Bishop College
3837 Simpson-Stuart Road
Dallas, Texas 75241

Balthaser, R. D.
State Super. Bus. Ed.
G-17, State Departments Bldg.
65 S. Front
Columbus, Ohio

Blendon, Edward G.
John Bartram High School
Philadelphia, Pennsylvania

Bowen, W. C.
Assoc. Prof. Agri. Educ.
Agri. Education Dept.
Clemson University
Clemson, South Carolina

Bruner, Dr. Ruth
Head, Dept. of Office Adminis.
Northeast Louisiana State College
Monroe, Louisiana

Buckelew, T. W.

Burger, C. G.
Pittsburgh Public Schools
Pittsburgh, Pennsylvania

Burke, Wallace W.
Assistant State Supervisor
Trade & Industrial Education
Room 432, Education Building
Raleigh, N. C. 27602

Byrnside, O. J., Jr.
Vocational Education
State Dept. of Education
Capitol Building
Charleston, West Virginia 25305

Cain, Guy E.
Vocational Agriculture
Dept. of Educ., Voc. Division
Capitol Building
Charleston, West Virginia

Cameron, Robert M.
Indiana University
223 South Jordan
Bloomington, Indiana

Carr, Eva S.
State Supervisor
Voc. Bus. and Off. Ed.
Dept. of Ed.
Montgomery, Alabama

Carter, K. Kenneth
State Supervisor, Voc. Business Ed.
Dept. of Education
Frankfort, Kentucky 40601

*Five participants were unable to attend the Seminar because of an airline-machinists' strike.

Champion, Frances E.
State Dept. of Education
Room 203, Knott Building
Tallahassee, Florida

Cheatham, John M.
Assoc. Prof. Ag. Eng.
900 East Harding Ave.
Pine Bluff, Arkansas

Cheshire, H. R.
Teacher Educator, Distributive Ed.
College of Education
University of Georgia
Athens, Georgia 30601

Clark, Wallace L.
State Board Staff
32 State Services Bldg.
Denver, Colorado

Colvin, T. S.
State Dept. of Education
Louisiana

Crabill, William R.
Area Supervisor, Agri. Ed.
45 W. Boscawen Street
Winchester, Virginia 22601

Crabtree, Myrna L. P.
New Jersey State Dept. Ed.
225 West State Street
Trenton, New Jersey

Cummings, Amanda
Area Supervisor, Home Economics
201 Ashby Street, N.W.
Atlanta, Georgia 30314

Dalrymple, Julia
Home Ec. Education - OSU
3005 Stadium Drive, Apt. 1
Columbus, Ohio

Davis, Clyde H.
Teacher-Coordinator
Dept. of Education
P. O. Box 630
St. Thomas, Virgin Islands

Davis, Harry F.
State Office
610 State Office Building
Columbus, Ohio

Davis, James A., Consultant
Diversified Programs
State Dept. of Education
215 Knott Building
Tallahassee, Florida

Deischer, Mildred
Home Ec. Field Representative
Salem Voc. Te. Community College
2535 Alvarado Terrace S.
Salem, Oregon 97302

Dimperio, Michael J.
Public Schools
635 Ridges Avenue
Pittsburgh, Pennsylvania 15212

Dogan, James E.
Ass't. Supervisor - Voc. Agriculture
Room 16 G. State Office Building
Front Street
Columbus, Ohio 43215

Draper, Dorothy
Head, State Supervisor
State Dept. Education
Division Voc. - Tech.
205 Cordell Hull Building
Nashville, Tennessee

Dunn, Edward
Consultant, Program Development
Dept. of Education
Vocational Education Division
Centennial Office Building
St. Paul, Minnesota 55101

Ellis, Jewell D.
Murray State University
Box 1279
Murray, Kentucky

Ensminger, Isabel S.
Auburn University
Auburn, Alabama

Evans, Helen P.
Pittsburgh Public Schools
OVT Center - 635 Ridges Avenue
Pittsburgh, Pennsylvania

Ferrer, Maria L., Director
Distributive Education Program
Vocational Education Division - Box 8
Hato Rey, Puerto Rico 00919

Fletcher, Charles A.
Washington State
6835 20th Avenue Northeast
Seattle, Washington

Frazier, Wm. D.
Assoc. Director, Oklahoma RCU
312 Dairy Building
Oklahoma State University
Stillwater, Oklahoma 74074

Gaddis, Allen R.
Supervisor of Business Education
State Office Building
301 West Preston Street
Baltimore, Maryland 21201

Gallington, Ralph O.
School of Technology
Southern Illinois University
Carbondale, Illinois

Gehring, Virgil D.
State Supervisor of OE
State Capitol
Bismark, North Dakota

Gordon, Archie G.
Teacher Trainer
Alcorn A & M College
Lorman, Mississippi

Grandfield, Raymond
State Supervisor of Bus & D. E.
State Dept. of Ed.
Cheyenne, Wyoming

Greeson, R. F.
Area Supervisor, Distributive Ed.
251 State Office Building
Atlanta, Georgia 30334

Hanson, Garth
Utah State University
Logan, Utah

Harrison, Wayne
Supervisor, Distr. Ed.
Department of Public Instruction
Room 148, North Capitol
Madison, Wisconsin

Hines, Joseph W.
Assistant Regional Director
Bureau of Labor Statistics
U. S. Department of Labor

Hirschler, Elizabeth
Assistant Adviser
Room 1116, State Office Building
Topeka, Kansas

Hockersmith, Ruth
Homemaking Cons.
1781 Serenity Drive
Medford, Oregon

Hoerner, Thomas A.
Teacher Trainer in Ag. Ed.
Agricultural Education Dept.
The Pennsylvania State University
University Park, Pennsylvania 16802

Hutson, Denver B.
Head, Dept. Voc. Teacher Education
University of Arkansas
Fayetteville, Arkansas 72701

Jackson, Mildred
State Supervisor, Dist. Ed.
251 State Office Building
Atlanta 3, Georgia

Jennings, W.

Johnson, Spensor V.
Assistant State Supervisor
Box 2847
University, Alabama

Jones, Luther
Conrad High School
Boxwood Road & Jackson Avenue
Wilmington 4, Delaware

Karr, Don L.
The Ohio State University
2679 Alder Vista Drive
Columbus, Ohio 43224

Keehan, Virginia
Chief of Program Development
Women's Division
Office of Economic Opportunity
1200 19th Street, N.W.
Washington, D.C.

Kell, Venetta B.
Northern Arizona University
Flagstaff, Arizona

King, Sam W.
Field Representative
Manpower, Development and Training
Department of Health, Educ. & Welf.
U. S. Office of Education
Denver, Colorado

Kirk, Marie B.
Pittsburgh Public Schools
635 Ridges Avenue
Pittsburgh, Pennsylvania 15212

Kluger, Ethel
Pre Vocational Counselor
Columbus State School
1601 West Broad Street
Columbus, Ohio

Koon, R. H.
Ass't. State Supervisor, Dist. Ed.
State Office Building
65 Front St., Room 611
Columbus, Ohio

Kuykendall, Lloyd N.
Regional Supervisor Ag. Ed.
309 Park Century Building
1408 Highland
Jackson, Tennessee

Laux, E. F.
Ford Motor Company
Dearborn, Michigan

Levine, Morton
Division of Manpower and
Occup. Outlook
Bureau of Labor Statistics, U.S. Dept.
Washington, D.C.

Logan, Otto K.
Distributive Education
State Board for Vocational Education
P. O. Box 248
Olympia, Washington

Logan, William B.
The Ohio State University
1945 North High Street
Columbus, Ohio

Love, Leah T.
Dept. of Business Education
Teachers College
Temple University
Philadelphia, Pennsylvania 19122

Luster, George L.
University of Kentucky
Agricultural Education
Lexington, Kentucky

Luxner, Lois A.
Pittsburgh Public Schools
OVT Center, 635 Ridge Ave.
Pittsburgh, Pennsylvania 15212

MacKenzie, Louise W.
Univ. of Rhode Island
Quinn Hall
Kingston, Rhode Island

Mackey, Betty
Ohio State Dept. of Education
712 State Office Building
Columbus, Ohio

Mailman, Harold L.
State Dept. of Education
State Office Building
Augusta, Maine 04330

Marcum, Steve B., Teacher Trainer
T & I at University of Kentucky
College of Education
University of Kentucky
Lexington, Kentucky 40506

Marks, Mary V.
Program Specialist
Distrib. and Marketing
U. S. Office of Education
Div. of Voc. and Tech. Educ.
Washington, D.C.

Martin, W. Howard
University of Connecticut
Storrs, Connecticut

Mason, Ralph E.
Prof. and Chairman Div. of Bus.
and Distributive Educ.
Indiana State University
Terre Haute, Indiana

Mattingly, John D.
Teacher-Education
Kent State University
Kent, Ohio

- McCarthy, Anne R.
State Supervisor - Home Ec.
Roger Williams Building
Hayes Street
Providence, R. I. 02906
- McDermott, Mrs. Lyle
Chairman, Dept. of Economics &
Bus. Educ.
College of Saint Rose
Albany, New York
- McVicker, Howard E.
Purdue University
Room 208, Ed. Building
Lafayette, Indiana
- Meinert, Harry A.
Illinois State Bd. Voc. Ed.
405 Centennial Building
Springfield, Illinois
- Mendez, Qelicitia R., Director
Business Ed. Program
National Ed. Dri.
Hato Rey, Puerto Rico
- Miller, John K.
Cornell University
210 Stone Hall
Dept. of Rural Education
Ithaca, New York 14850
- Mitchell, E. F.
Mississippi State University
State College
Box 455
Mississippi
- Mock, Perry
Associate Professor
Bus. Division Central Mo. St. Col.
Warrensburg, Missouri 64093
- Monts, Elizabeth A.
University of Wisconsin
5316 Brody Drive
Madison, Wisconsin
- Moseley, Eugenia F.
George Peabody College
21st Avenue, South
Nashville, Tennessee 37203
- Newsom, Carolyn A.
Indiana University of Pennsylvania
Dept. of Home Ec.
Indiana, Pennsylvania 15701
- Norris, Marsena M.
Oklahoma State University
Agri. Educ. Department
Stillwater, Oklahoma 74074
- O'Dell, Frank
Guidance Services, Division of
Guidance and Testing
State Dept. of Education
751 N. W. Boulevard
Columbus, Ohio
- O'Kelley, George L., Jr.
University of Georgia
221 Baldwin Hall
Athens, Georgia 30601
- Olson, Jerry C.
Pittsburgh Public Schools
635 Ridges Avenue
Pittsburgh, Pennsylvania 15212
- Paleen, Ethel
University of Minnesota
Department of Education
Minneapolis, Minnesota
- Parker, Andrew J., Sr.
Ass't. Professor Industrial Ed.
Purdue University Calumet Campus
2233 171st Street
Hammond, Indiana 46323
- Parker, E. Charles
Specialist, Office Occupations
Room 218, State Capitol
Salt Lake City, Utah 84114
- Paulson, Virginia B.
Head, Home Ec. Ed. BYU
471 East 900 South
Orem, Utah 84057
- Pennington, Don E.
Agriculture Supervisor
309 W. Washington Street
Indianapolis, Indiana

Pieretti, Genevieve
State Supervisor of Home Ec. Ed.
Heroes Memorial Building
Carson City, Nevada 89701

Pilkenton, Miss Fay
Area Supervisor Business & Office Ed.
State Department of Education
Atlanta, Georgia

Powell, J. R.
Teacher Education
Agricultural Education Dept.
Prairie View, Texas

Price, Dennis H.
Prof. of Vocational Education
College of Education
University of Cincinnati
Cincinnati, Ohio

Pulse, Paul F.
Assistant Supervisor
2120 Fyffe Road
Columbus, Ohio 43210

Richardson, Martha L.
Wichita Area-Technical School
5920 Avalon
Wichita, Kansas

Schaer, Oliver K.
Washington State Bd. for Voc. Ed.
P. O. Box 248
Olympia, Washington

Schnell, Dorothy M.
Bureau of Homemaking Education
California State Dept. of Educ.
621 Capitol Mall
Sacramento, California

Schultheis, Robert A.
Temple University
Philadelphia, Pennsylvania

Senkewitz, Edward G.
Pittsburgh Public Schools
635 Ridges Avenue
Pittsburgh, Pennsylvania

Sessions, Jack
Staff Representative
American Federation of Labor and
Congress of Ind. Organizations
815 Sixteenth Street N.W.
Washington, D.C.

Shack, Christine R.
Coop. Office Occupation
Department of Education
225 West State Street
P. O. Box 2019
Trenton, New Jersey

Shadle, Owen J.
Iowa State University
102 Industrial Education
Ames, Iowa

Shoemaker, Byrl
State Director of Voc. Ed.
Columbus, Ohio

Shoemaker, Paul
Adult Ed. Consultant
State Dept. of Education
Div. of Vocational Education
163 Sunbury Road
Chillicothe, Ohio

Simmon, J. C.
Louisiana

Smith, Farmer
Ass't. Professor Industrial Ed.
Raleigh, North Carolina

Sneed, Murel Harry
Pittsburgh Public Schools
Pittsburgh, Pennsylvania

Spezzano, James A.
Pittsburgh Public Schools
Connelly V. T. High School
Pittsburgh, Pennsylvania

Stephenson, Hugh M., Manager
Manpower and Organization Development
Dayton, Ohio

Stewart, R. Jeffrey, Jr.
Associate Professor, Business Education
Virginia Polytechnic Institute
Blacksburg, Virginia

Stewart, Vannoy
Head Teacher Trainer
Sam Houston State College
Huntsville, Texas

Stogdill, Ralph M
Prof. of Business Organization
The Ohio State University
1755 College Road
Columbus, Ohio

Strand, Ron
State Supervisor, Distributive Educ.
Minnesota Dept. of Education
Centennial Building
St. Paul, Minnesota 55101

Thomas, Ricey
United Kingdom

Toothman, Rex C.
State Dept. of Education
215 Knott Building
Tallahassee, Florida

Trink, Inez, Chairman
Bus. Educ. and Off. Mgmt.
School of Business
Florida State University
Tallahassee, Florida

Tull, Christine L.
Home Ec. Teacher Educator
435 Seaside Avenue
Honolulu, Hawaii 96815

Turnbough, S. R.
Clovis, New Mexico

Turner, Llewellyn
State Dept. of Education
State Office Bldg., Box 2219
Hartford, Connecticut

Via, D. Macil
State Department
Education Building
Room 484
Raleigh, North Carolina

Vivian, Neal F.
University of Tennessee
106 Claxton Educ. Building
Knoxville, Tennessee 37916

Way, Darrel E.
State Dept. of Education
Vocational-Agriculture
Education Building
Little Rock, Arkansas

Welch, Frederick B.
Portland High School
284 Cumberland Avenue
Portland, Maine

Weyant, J. Thomas
State Supervisor
Box 911
Dept. of Public Instruction
Harrisburg, Pennsylvania 17126

Whatley, Imogene L.
Texas Christian University
P. O. Box 30775
Fort Worth, Texas 76129

Wiegers, George
University of Tennessee
Knoxville, Tennessee

Williams, Geraldine, D. Dr.
Associate Professor
Southeast Junior College
8600 S. Anthony Avenue
Chicago, Illinois 60619

Williamson, Laura S.
Pittsburgh Public Schools
OVT Education Center
635 Ridges Avenue
Pittsburgh, Pennsylvania

Willis, C. Josephine, Supervisor
Voc. Business and Office Education
State Dept. of Education
Baton Rouge, Louisiana

Willon, Genevieve
Home Economics Teacher
1534 Stanford, N. E.
Albuquerque, New Mexico

Wineiger, Earl
State Office Building
Topeka, Kansas

Woodin, Ralph J.
Professor in Ag. Ed.
The Ohio State University
203 Ag. Administration Bldg.
Columbus, Ohio

Worthington, Robert M.
State Dept. of Education
Trenton, New Jersey

Wykle, James H.
Regional Office IV
Dept. of HEW
Atlanta, Georgia

Wyllie, John R.
Vocational Division
New Jersey State Dept. of Ed.
225 West State Street
Trenton, New Jersey

Yates, Mabel A.
State Dept. of Education
205 Cordell Hull Building
Nashville, Tennessee

York, Bill J.
Vocational Agriculture
State Dept. of Education
Montgomery, Alabama

Zockle, Michael A., Coordinator
Cooperative Occupational Training
8562 Sleepy Hollow, N. E.
Warren, Ohio

Appendix F

Reports of Selected Cooperative Work-School Programs

The coordinators of the cooperative education seminar express thanks to the administrators, teachers, and students of the schools and colleges listed below who have cooperated in furnishing first-hand information about their respective cooperative education programs. This first-hand information has been very helpful for planning and implementing the Co-operative Education National Seminar which was held in August, 1966, and also for developing the guidelines of this publication.

Phoenix College, Phoenix, Arizona

Phoenix Union High School System, Phoenix, Arizona

A. P. Leto High School, Tampa, Florida

Lamphier High School, Springfield, Illinois

Grosse Pointe High School, Grosse Pointe, Michigan

Lansing Community College, Lansing, Michigan

Jefferson Senior High School, Alexandria, Minnesota

Fergus Falls Area Junior College, Fergus Falls, Minnesota

Hopkins Senior High School, Hopkins, Minnesota

Kirkwood High School, Kirkwood, Missouri

South Mecklenburg High School, Pineville, North Carolina

Columbus Area Technician School, Columbus, Ohio

Dayton Public Schools, Dayton, Ohio

Marysville High School, Marysville, Ohio

THE CENTER FOR VOCATIONAL AND TECHNICAL EDUCATION,
OHIO STATE UNIVERSITY
980 Kinnear Road, Columbus, Ohio 43212
SELECTED COOPERATIVE WORK-SCHOOL PROGRAMS

1. School Information

Name of School _____ Phone No. _____

Address _____

Principal _____

Vocational Director and/or Supervisor _____

Teacher-Coordinator(s) _____

Guidance Counselor(s) _____

Total Enrollment of School _____, Grades included: 9 _____, 10 _____

11 _____, 12 _____, 13 _____, 14 _____

Type of school (e.g. comprehensive, area vocational, etc.) _____

Explanation _____

2. Title of Program or Course

Descriptive title _____

General Description _____

PRECEDING PAGE BLANK-NOT FILMED

3. Description of Program or Course

Cooperative Work-Study _____, Occupational Work Experience _____

Grade Level: 10 _____, 11 _____, 12 _____, 13 _____, 14 _____

Length of program in weeks _____, Current enrollment _____, Recommended

Enrollment _____, Average class size _____, Number of pupils working _____

Number of firms involved _____, Number of job titles _____

4. Recruitment Procedure_____
_____**5. Guidance and Testing**

Person(s) responsible for pupil selection _____

Person(s) primarily responsible for counseling _____

Screening tests used _____

6. Enrollment Standards

General Intelligence: Low____, Low Av.____, Average____, High Av.____, High ____

I. Q. Range: From____to____, Median I. Q.____, Explanation _____

Required courses or grade completed _____

Recommended courses _____

Personal-social skills recommended or required _____

Physical attributes or abilities required _____

7. Typical Weekly Schedule for Cooperative Students

Number of classroom hours per week devoted to: Related Technology _____

General Employment Information _____, General school subjects _____

Employment _____, Other _____

Description of work-school plan _____

Employment outlook _____

Description of typical cooperative or work experience jobs _____

8. Instructional Pattern

Nature and extent of pre-employment instruction (Orientation, shop, etc.) _____

Nature and extent of in-school instruction during employment period.

(Include course outline, title of textbook, etc.) _____

9. Weekly Schedule of Teacher-Coordinator or Coordinator

Number of hours devoted to teaching: General employment information _____

Related technology _____, General subjects _____, Other _____

Frequency of coordination visits per student _____, Comments _____

Time assigned for coordination _____, For counseling _____, Other school duties

(hall duty, testing, activities, etc.) _____

Coordinator responsible for:

a. Placement on job _____

c. Evaluation of performance _____

b. Follow-up on job _____

d. Follow-up of graduates _____

Other _____

10. Qualification and Preparation of Teacher-Coordinator and/or CoordinatorFormal education required (Degrees, majors, etc.) _____

Years of teaching experience to qualify as coordinator _____

Years and/or months of employment experience in business, industry,
agriculture or home economics _____Pre-employment vocational instruction (orientation class, time spent, etc.)
_____Required in-service courses or assignments _____

Number of months that coordinator is employed _____

11. Facilities used and/or Recommended

No. of classrooms____, Laboratories____, Offices____, Other _____

Classroom size, description and furniture _____
_____Laboratory size, description and equipment _____
_____Shop(s) size, description and equipment _____
_____**12. Advisory or Consulting Committee**Organization and function (size, frequency of meetings, representatives from,
etc.) _____

13. **Public Relations Activities (Include folders, form letters, bulletins, etc.)** _____

14. **Activity Program for Co-Op Students (D.E.C.A., V.I.C., etc.)** _____

15. **Comments and suggestions (Re: faculty support, guidance services, etc.)** _____

16. **Unusual Features and/or Advantages, Etc.** _____

Other Center Publications

"Guidelines for State Supervisors in Office Occupations Education."
1965 Business Clinic

A Report of a National Seminar on Agricultural Education, "Program
Development and Research."

"Guidance in Vocational Education." - Guidelines for Research and
Practice.

"Research Planning in Business and Office Education."

"Evaluation and Program Planning in Agricultural Education."

"A Report of a National Seminar on Health Occupations Education
Centers."

"A Report of a National Seminar on Cooperative Education."

A Report of "A National Leadership Seminar on Home Economics Education."